AUTHOR INDEX

A

Aagaard C, 707, 708
Aarsaether N, 871
Aasl R, 373
Aasland R, 871
Abagyan R, 556, 562, 564, 565, 567, 568
Abate C, 321
Abaturov LV, 558–60
Abbanat DR, 294
Abbott JC, 278
Abbotts AP, 369
Abbotts J, 365
Abdelsayed SV, 590, 602, 606
Abdulkarim F, 684
Abe H, 340
Abeijon C, 317, 318, 323
Abel K, 647, 648
Abeles RH, 40, 271, 296, 301, 307, 342
Abend A, 296, 300
Abersold RH, 839
Abeygunawrdana C, 721
Abousalham A, 491
Aboussekhra A, 80
Abrahams JP, 719, 722, 724, 733, 741, 742, 801
Abramovitch DA, 215
Abramovitz DL, 22
Abrams R, 183
Abramson PD, 795
Abumrad NA, 634
Acheson NH, 136, 144
Ackerman SH, 896, 897
Acton SL, 514, 516–19, 537
Adachi Y, 62, 64, 66, 68, 74
Adair WL, 237
Adam E, 814
Adamczewski JP, 156
Adamkiewicz DM, 374
Adams J, 375
Adams MD, 111, 185, 275, 762, 778
Adams MWW, 234–37, 240, 259, 263, 265
Adams SR, 812
ADDINALL SG, 93–116; 101–3, 106, 111
Addison C, 352
Adelman SJ, 632
Adesnik M, 535
Adhya S, 139
Adhya SL, 441
Adjalla CE, 291
Adler HI, 107
Admiraal SJ, 663
Admon A, 456
Adya N, 814
Adzuma K, 442, 444, 458, 459
Aebersold R, 77, 151, 206
Aebi U, 320
Aevarsson A, 648, 683
Affara NA, 120, 145
Agard DA, 564–68
Agarwal K, 131, 149
Agarwal N, 766, 768
Aggeler R, 719, 720, 723, 724, 741
Agrawal RK, 690
Agrimonti C, 901
Agsteribbe E, 896
Aguinaldo AM, 699
Aguzzi A, 400, 606
Aguzzi A, 400
Ahearn JM Jr, 321
Ahle S, 537
Ahmadian MR, 656, 663, 664
Ahmed S, 500
Ahn BC, 141
Ahn BY, 149
Aiba H, 179
Aimoto S, 868
Ainscough R, 64
Aitken A, 875
Aiyama A, 218
Akamatsu Y, 206, 207, 215
Akasaka K, 561
Akerlund T, 106
Akeson RA, 834
Akey CW, 319
Akimaru H, 478, 818
Akira S, 603
Akisue T, 497
Akiyama N, 770, 771
Aksoy S, 461
Akutsu H, 739
Alagappan R, 777
Alam R, 873, 875
Alani E, 65, 68
Alard P, 553
Albert I, 655
Alberts A, 812, 815
Alberts AS, 812, 817, 818
Alberts BM, 145, 160, 378, 797
Albery WJ, 22, 23
Albigot R, 97
Albracht SPJ, 271, 291, 296, 300, 301
Alconada A, 743, 877, 879, 882
Alexandrescu AT, 559
Alexson SEH, 618
Alfin-Slater RB, 614
Ali MA, 375
Ali N, 526
Ali Z, 456
Alifano P, 179
Al-Kobaisi MF, 352
Allain FH-T, 687
Allan D, 632
Alleman M, 457, 467
Allemann RK, 53
Allen CJ, 392, 398
Allen JA, 426
Allen L, 29
Allen M, 275
Allen PN, 690, 707
Allende JE, 650
Alleyne GA, 584
Allison DS, 869
Allison RG, 448
Allison SA, 22
Allison WS, 721, 722, 725, 729–33, 740
Allmaier M, 464
Allmang C, 417
Allmansberger R, 110
Allsop J, 871
al-Maamary S, 457
Almeirda J, 456
Almo SC, 41, 643, 655, 662
Aloise P, 722
Aloni Y, 128, 129, 136, 140, 144
Alonso C, 462
Alper S, 110
Al-Seeni M, 626
Al-Shawi MK, 721, 724, 737, 738
Alt FW, 778
Altendorf K, 725, 726, 735, 736, 739
Altieri F, 316
Altman RB, 692, 693
Altman S, 22, 29, 410
Altmann CR, 121, 123, 132, 161
Altmann M, 175
Altshuller YM, 492, 493, 498
Alvarez A, 392, 397
Alvarez-Bolado G, 766, 768
Alziari S, 191

Amano T, 739
Amaratunga M, 276, 278, 283, 288
Amati B, 323
Ambron RT, 317
Amemur A, 724
Amende LM, 629
Ames BN, 207, 426
Amiche M, 339–41
Amils R, 701
Amin AA, 62, 67, 68, 75, 78, 83–86
Ammini CV, 425, 426
Amodeo P, 343
Amons R, 641
Amor JC, 646, 647, 653
Amos LA, 803
Amyes TL, 11
Amzel LM, 563, 720
Andemariam B, 631
Andersen B, 584
Andersen HC, 554
Andersen LB, 463
Anderson BF, 555, 562
Anderson CW, 80, 85
Anderson DE, 556, 562
Anderson JW, 582
Anderson K, 64, 803
Anderson P, 446
Anderson R, 62, 64, 68, 73, 86
Anderson RGW, 515, 521, 523, 526–30, 532–34, 630, 632
Anderson RL, 873
Anderson S, 410
Anderson WB, 499
Andersson A-S, 203, 225
Andersson H, 220
Andoh T, 211, 477
Andreae MO, 242
Andreone T, 584, 585
Andreone TL, 593, 594
Andreu JM, 389, 390, 393
Andrianambinintsoa S, 731
Andrisani OM, 809, 811
Ang D, 885, 887, 888
Angel P, 818
Angleson JK, 486
Aniento F, 512
Anin MF, 131, 141
Annex BH, 421
Anson M, 795
Antar S, 490
Antequera F, 762
Anthes JC, 492, 499, 501
Antonarakis SE, 462, 463
Antonelli M, 650
Antonio BJ, 743, 799
Antonny B, 660
Antoshechkin I, 414, 424
Antras-Ferry J, 589, 591
Anxolabehere D, 456
Anziano PQ, 428
Aono O, 722
Aota S-I, 846
Aoyama A, 326
Aoyama H, 215
Appel SH, 395, 842
Appelt K, 687
Applegren N, 79
Aquilina JA, 326
Aragay AM, 652, 653
Arai K-I, 482, 651, 652
Arai N, 651, 652
Arany Z, 819
Arbuckle MI, 356, 367
Arca B, 455
Archaimbault B, 500
Archambault J, 138, 149, 157
Archer M, 234, 237, 240, 247, 249
Archer RH, 417
Arciszewska LK, 458
Arden R, 839
Argnani R, 373
Argos P, 553, 555, 556, 564–69
Argraves WS, 847
Arias J, 817–19
Aridor M, 512, 513
Arigoni D, 296
Arigoni F, 110
Arioka M, 316
Aris JP, 320, 727, 799
Arkell RM, 776
Arkinstall S, 671
Arlt H, 814, 894, 897
Armstrong R, 811–13, 815
Arnal I, 803
Arnaout MA, 848
Arndt KM, 120, 125, 128, 157, 161
Arnheim N, 779
Arnold CS, 316–18, 325, 330, 331
Aroeti B, 539
Aron GM, 355
Arondel V, 202, 205
Aronzon A, 489
Arraiano CM, 188
Arretz M, 892, 895
Arsequell G, 330
Arshavsky VY, 486, 664
Artemyev NO, 486, 657, 664
Arthos J, 856
Arulanandam ARN, 852, 856
Arvieux J, 855
Asai Y, 208
Asakura L, 389, 393
Asano S, 386, 390, 393
Asano T, 486, 671
Aschman DP, 355
Ashburn TA, 386
Asher Y, 350, 351
Ashfield R, 151
Ashman DP, 355, 367, 368, 370
Ashton SV, 834
Ashworth DM, 275
Aso T, 119, 147
Asouline G, 768, 774
Assadi-Porter FM, 725
Assan R, 599, 600
Asselin C, 151
Assmann G, 614
Aster JC, 62, 75
Atencio DP, 873, 874, 884
Atha T, 688, 699
Athma P, 457
Atkins JF, 22, 709
Atmadja J, 692
Atrazhev A, 62, 69, 77
Attardi G, 151, 191, 194, 410, 412, 428, 429
Attardi GM, 864
Attie AD, 627
Attila M, 339
Aubry N, 375
Aucker J, 365
Audigier Y, 667
Auger M, 387, 389, 396, 404
August JT, 175, 183
Aukhil I, 847
Aurelian L, 350
Austin TW, 534
Ausubel FM, 457, 770, 771, 774
Autenried P, 400
Avadhani NG, 191, 418, 426, 427
Averboukh L, 778
Averett DR, 375
Avetissova E, 122, 128, 160
Avruch J, 809
Awrey DE, 123, 132
Axel R, 758, 840
Axelsen PH, 22, 553
Azevedo V, 185

B

Baase WA, 556, 562
Baba T, 529, 534, 535, 541, 542
Babbitt PC, 619
Babior BM, 301
Bacchetti S, 375
Bach JP, 606
Bachenheimer SL, 350–52
Bachinger HP, 817, 819
Backer JM, 426
Bacote V, 329
Bader BL, 324
Bader DS, 811
Badger J, 687
Bae H, 657, 658
Bae LM, 205
Bae YS, 489, 498
Baek KH, 131, 149
Baek KJ, 490
Baer RJ, 191

Baes CF Jr, 30
Baeuerle PA, 319
Baffy G, 489
Bagby S, 829, 831
Baglia F, 318
Bahler M, 317, 325
Bailey M, 375
Bailey S, 234, 237, 242
Bainton RJ, 439, 442, 449, 459, 460
Baker A, 866, 869, 877, 882
Baker B, 457
Baker CC, 136
Baker EN, 553, 555, 562
Baker KP, 864, 877, 878, 882, 899
Baker PJ, 291
Baker S, 321
Baker TA, 62, 77, 370, 373, 374, 420, 460
Bakin A, 709
Bakker E, 220
Bak-Mueller S, 615, 617
Balakin A, 700
Balantac N, 207
Balasubramaniam S, 617
Balasubramanian S, 556, 562, 574
Balasubramanian V, 457
Balboa MA, 495
Balch WE, 512, 513, 537–39, 643, 670
Baldacci G, 415
Baldassare M, 774, 776, 777
Baldini A, 622
Baldwin EP, 556
Baldwin RL, 557–61
Ball A, 490
Ball CL, 529, 532
Ballard FJ, 582, 584, 593, 594, 599, 600, 602, 604
Ballard J, 599, 600
Ballas L, 500
Ballou DP, 279–81
Balsinde J, 492, 499
Baltimore D, 778
Bambara RA, 77, 79
Bamberger M, 617
Bancroft I, 457
Bandlow W, 902
Banerjee RV, 275, 279–81, 288, 291, 296, 300, 308
Banerjee S, 338
Bankaitis V, 490
Banker GA, 789
Bankier AT, 410
Banks LM, 370–72
Bankston LA, 848
Bannister AJ, 818
Banno Y, 479, 486, 496, 497
Bannykh SI, 512
Bansal A, 539, 540
Bantle JA, 758
Banyai L, 845
Bapat AR, 371
Baracca A, 739
Baradaran K, 357
Barak I, 110
Barak LS, 530, 542
Baranger AM, 814
Barat M, 418, 421
Barat-Gueride M, 421
Barbacid M, 643, 652
Barber J, 741
Barber MJ, 237, 255, 256
Barclay AN, 825, 828, 829, 852, 854, 856–58
Bard M, 618, 622
Bardeleben C, 119, 130, 132
Barkalow FJB, 847
Barker HA, 272
Barlam TF, 367
Barlowe C, 512, 513
Barnabei O, 201
Barnes CL, 24
Barnes JP, 447
Barnes S, 324, 331
Barnes WM, 777, 779
Barnett CJK, 146
Barnett LD, 317, 327
Bar-Nun S, 626
Barogi S, 739
Baron M, 843, 845, 846
Barouch W, 522, 537
Barque J-P, 317, 322
Barra D, 339–41
Barra J, 606
Barraclough R, 895
Barrell BG, 410
Barrett LW, 390, 391, 396, 398, 399
Barrett RW, 49
Barrick D, 560, 561
Barron LD, 558, 559
Barrow CJ, 391, 396
Barrow RK, 525
Barry GF, 466
Bar-Sagi D, 488, 643
Barsh GS, 424
Barstead RJ, 147
Barta A, 701
Bartel DP, 22, 45, 47, 49, 51
Bartels H, 686
Bartfeld N, 427
Barthelmess IB, 894, 896
Bartholomew B, 119, 162
Bartl F, 735, 736
Barton CH, 834
Barton R, 851
Bartucci EJ, 615
Barzilai A, 833
Bascle J, 559
Bashkin P, 488
Bass BL, 22
Bass I, 143
Bastia D, 145
Bastian H, 584
Bastian NR, 237
Bastiani CA, 618
Bastion NR, 237
Bastos R, 320
Bastow KF, 368
Basu A, 418
Basu P, 258
Bateman A, 828, 836, 838, 839
Bateman E, 130
Bates PA, 853
Bates TS, 242
Batey RT, 24
Batson SC, 154
Battelli MG, 250
Batterson W, 353
Battey J, 774
Battiste JL, 24
Batzer A, 488
Bauer D, 778
Bauer G, 79
Bauer MF, 885, 888, 890, 891, 894
Bauer RE, 877, 878, 882
Bauernfeind R, 535
Baum J, 559
Baumann P, 112
Bause E, 317, 327
Bauvy C, 316
Baxevanis AD, 414
Baybutt HN, 365
Bayliss GJ, 355, 359
Baynes C, 64
Bazemore LR, 440
Bazenet C, 488
Beal MF, 426
Beale EG, 583–85, 587–90, 592, 601
Beall B, 109
Beall EL, 456
Bear DG, 157
Beard CB, 461
Beard J, 43
Beasley EM, 864, 901, 905
Beatini N, 623, 632
Beatrix B, 275, 285, 291, 296, 299, 300, 302
Beauclerk AAD, 711
Beaulieu A, 497
Beaumont C, 136
Bebrin WR, 364, 367
Beck KA, 519, 520, 523, 525
Beck WS, 301
Becker A, 490, 491, 618, 894, 896
Becker E, 706, 707
Becker JW, 834, 836
Becker K, 864, 872
Becker PB, 154
Becker Y, 350–52
Beckmann W, 812

Beckwith J, 183, 186, 212
Beddington RS, 776
Bedwell DM, 889
Beebe JA, 22, 23, 29, 44, 52
Beecham EJ, 427
Been MD, 22, 45
Beese LS, 41
Beeson JH, 615
Begg KJ, 95, 103, 104
Bègue B, 542
Beguinot L, 525, 539, 541
Behari J, 110
Behmoaras T, 74
Behrens M, 901
Beiderman B, 655, 658, 669
Beigelman L, 32, 43, 48
Beining PR, 202
Belachew A, 457, 458, 467
Belardetti F, 484
Belcher SM, 464
Belcour L, 464
Belfort M, 22, 29, 44, 463, 464
Belfrage G, 766, 768
Bell AW, 868
Bell GI, 596
Bell RM, 201, 203, 204, 208, 210, 226, 500
Bellard M, 136
Bellissimo D, 255
Bellosta S, 621, 622
Belmaaza A, 447
Belogrudov GI, 727
Belostotsky DA, 193
Belzile F, 457
Bembenek ME, 526
Ben-Asher E, 129, 136, 144
Bender J, 442, 443, 445, 446, 448, 466
Bender TP, 136
Benedek GB, 392, 394, 395, 397, 398
Bénédetti H, 542
Benfield PP, 624, 634
Bengal E, 128, 129
Bengtström M, 766, 768
Bengur AR, 803
Benian GM, 446, 828
Benjamin DR, 650
Benjamin HW, 442, 454
Benkel BF, 191
Benko DM, 317, 326
Benkovic SJ, 49, 50
Benmerah A, 542
Ben-Naim M, 632
Benner SA, 23, 53
Bennett B, 247
Bennett CF, 477, 479
Bennett DAH, 593
Bennett JL, 151, 416, 417, 420
Bennett WS, 686
Bennetzen JL, 457
Benning C, 202, 205
Benovic JL, 481, 668, 671
Ben-Porat T, 376
Benson AA, 492
Benson DR, 660
Benson N, 237, 247
Bentley DL, 136, 144, 151, 153, 156
Bentley GA, 825
Benvenisty N, 587, 591, 592, 599–602, 605
Benyesh-Melnick M, 355
Berchtold H, 643, 648, 656, 663
Berden JA, 729, 732
Berendt AR, 851
Berezin V, 834, 835
Berg CM, 466
Berg DE, 438, 443, 445, 454, 466
Berg HC, 798–802
Berg JM, 257, 258, 361
Berg OG, 483
Berg P, 72, 75, 80, 133
Berger EP, 388, 390, 391, 394, 396, 397, 399
Berger G, 731
Berghuis AM, 482, 643, 649, 650, 655, 657, 658, 662, 665, 669
Bergman AC, 374
Berk BC, 489
Berkich DA, 735, 738
Berkovitch-Yellin Z, 686
Berkowitz LA, 815
Berks J, 64
Berlin MS, 367–69
Berliner E, 803
Berloco M, 452
Berlot CH, 657, 669
Berman DM, 487, 664, 665
Berman L, 848
Bermudez-Cruz RM, 157, 163
Bernad A, 364, 368, 421
Bernal JD, 552
Bernander R, 106
Bernard DW, 617
Bernardi G, 415, 757, 766
Berns K, 441, 466
Bernstein FC, 642
Bernstein KE, 489
Berstein G, 486, 487, 664
Berthet-Colominas C, 672
Berthier F, 191
Berthold J, 885, 890, 891, 894
Bertin J, 144
Besansky NJ, 461
Bessen RA, 397, 402
Bessho T, 74, 75, 80
Best A, 500
Best MG, 355
Bethlendy G, 900
Beullens M, 813
Beurling K, 24
Beverly SM, 350
Bevilacqua PC, 22, 37, 38, 48
Bevins CL, 339
Beyer D, 708
Beyer K, 214–16
Beyou A, 458
Beyreuther K, 387
Bhagwat A, 458
Bhangu R, 699
Bhat GJ, 136
Bhat NK, 426, 427
Bhatia J, 478, 485
Bhattacharyya MK, 478
Bi E, 95, 99, 102, 103, 106, 107
Bianchet M, 720
Bianchi V, 278, 288, 378
Bickel-Sandkotter S, 743
Bickford JK, 851
Biddlecome GH, 486, 487, 657, 664, 669
Bieber AJ, 834, 836, 838
Bielfeldt T, 322
Bienek C, 490, 495
Bierbaum G, 339
Bierer BE, 856
Bierman EL, 630
Biernat J, 325
Biessmann H, 462
Bifano M, 364, 367, 369
Bigay J, 660
Biggerstaff M, 80
Biggs WH, 809
Bijl J, 421
Bik EM, 457
Bilanchone VW, 450
Bilezikjian LM, 809
Bilgin N, 684
Billah MM, 492, 493, 496, 499, 501
Billheimer JT, 617, 619, 621, 627, 633
Biltonen R, 30
Bina-Stein M, 30
Binnie U, 186
Binns N, 186
Biragyn A, 136, 139
Birch A, 275
Bird A, 762
Bird LE, 744
Bird P, 491
Birkenhäger R, 725, 726
Birnbaumer L, 650, 662, 666, 667
Birney E, 481
Bischof O, 711
Bisgaard HC, 604, 606
Bishop JM, 458
Bishop JO, 758, 760–62
Biswal N, 351, 352, 355, 371
Biswas EE, 77
Biswas SB, 77
Bittner D, 426

Bjarnason I, 424
Bjerke M, 439, 452
Bjorkhem I, 618
Bjorklund S, 136, 146
Bjorkman PJ, 825, 834, 836, 838
Bjornberg O, 374
Black EP, 143, 144
Blackmore PF, 492
Blackwell LJ, 69, 81, 85
Blair DF, 799
Blair WS, 144
Blakley RL, 272, 291, 301, 307
Blanchard JM, 136
Blanchard S, 687, 688, 698
Blanchard SC, 698
Blanchette-Mackie EJ, 627, 629
Blanco L, 364, 368, 421, 743
Blank D, 905
Blank GS, 518
Blank JL, 484, 486, 664
Blank TA, 154
Blankenship ML, 376
Blaschek H, 561
Blasco MA, 364, 368
Blau J, 144
Blaurock AE, 842
Blaylock BA, 272
Blazquez E, 600
Blazquez M, 600
Blendy JA, 606
Blevitt JM, 320
Blinov VM, 356, 363
Blitzer RD, 478
Blix P, 599
Blobel G, 317, 318, 320, 873, 874, 879, 902
Bloch CA, 466
Block C, 655
Block SM, 787
Blokzijl L, 211
Blom J, 884–87
Blomberg MA, 316, 318, 320, 321, 327, 331, 450, 451
Bloomquist BT, 478, 490
Blow DM, 389
Blumenthal RM, 275, 278, 281, 282
Blumer KJ, 487, 664
Blundell T, 481
Blunt T, 80, 85
Bocan TMA, 615–17
Bocckino SB, 492
Bocher R, 275
Bochkarev RA, 69, 71
Bochkariov D, 697, 701
Bock K, 322
Bockaert J, 667
Bocquet-Pagés C, 222
Bode W, 40
Bodian DL, 851, 852, 854–57
Bodicker M, 892
Boedtker H, 51
Boehm CD, 463
Boehme R, 367
BOEHMER PE, 347–84; 356, 358, 361, 362, 364, 368–70
Boeke JD, 440, 442, 443, 445, 450, 451, 455, 456, 460–63, 466, 467
Boekema EJ, 726, 741
Boelens R, 214
Boer PH, 191
Bogard CL, 374
Bogatz S, 774
Bogdanov A, 695, 699, 700
Bogdanov MV, 214, 217, 219, 220
Bogenhagen DF, 131, 141, 414, 418, 420, 421, 424, 426, 430
Boger H, 608
Bogorad L, 192
Boguski MS, 664, 670
Boguta M, 871
Bohlen P, 902
Bohm A, 666, 667, 672
Böhm M, 774
Bohmont CW, 763
Bohr VA, 427
Bohrer W, 218
Boisvert DC, 896
Boiteux S, 426
Bokoch GM, 495, 497
Bolger G, 768, 774
Bolhuis PA, 387, 392
Boli W, 525, 540
Bolla J-M, 222
Bolland S, 440, 442, 445, 446, 449, 454, 455, 458, 460
Bolliger L, 878, 883, 885–88, 894, 895
Bolotina IA, 558–60
Bolton ET, 754
Boman AL, 532
Bömer U, 877, 879, 882, 886, 901
Bonaccorsi S, 452
Bonaldo MF, 771
Bonaldo P, 848
Bond MW, 190
Bond U, 151
Bonifacino JS, 525, 539, 541
Bonk RT, 427
Bonne-Andrea C, 74
Bonner LM, 485, 665
Bor YC, 447
Borasio GD, 651
Borbat P, 258
Borchardt RA, 616
Borchelt DR, 401
Bork P, 104, 827, 828, 853, 856
Borman GS, 350
Born E, 633
Borowiec JA, 62, 63, 66, 68, 69, 77, 81, 85, 358
Borowski C, 682
Borrelli E, 809
Bortner C, 362
Bortner S, 183, 186
Borukhov S, 125, 128, 132, 133, 148, 149, 157, 160, 162
Bosc DG, 322
Bosch F, 596
Bose A, 329
Bosshart H, 513, 521, 525, 539
Bossi L, 709
Bossone SA, 151
Botchan MR, 62, 74, 75
Bothwell AL, 778
Botstein D, 451, 455, 465
Bottcher A, 618
Böttcher B, 726, 741
Bottomley MJ, 535, 851, 852
Boublik M, 707
Boubnov NV, 80, 85
Bouchard D, 156
Bouche J-P, 97, 107, 108
Bouchey J, 361
Boulanger SC, 46
Boulet I, 538
Boulot G, 825
Boulton TG, 316
Bouquiere JP, 307
Bourdon MA, 847
Bourgoin S, 497
Bourne HR, 99, 640, 649, 650, 655, 657–59, 661, 662, 664, 669, 671
Boutin PM, 653
Boutry M, 872
Bovey R, 317, 323
Bowden SJ, 832
Bowditch RD, 846, 847
Bowerman B, 458
Bowie JU, 568, 569, 572
Bowles M, 275
Bowman C, 732, 739
Bowman EP, 493, 495, 497
Bowman S, 897
Bownds MD, 486
Boyd J, 845, 846
Boye E, 209
Boyer JL, 478, 484, 485
BOYER PD, 717–49; 31, 719, 721, 728–38, 740, 741
Boyington JC, 242
Boykow GC, 623, 627, 632
Brabant F, 144
Brackenbury R, 824, 833, 835
Bradbury EM, 80, 85, 130
Braden BC, 825
Bradley A, 590, 602, 606
Bradley P, 319
Bradley S, 664
Bradsher JN, 124, 147
Brady RL, 856

Braell WA, 537, 538
Bragg KL, 596
Bragg PD, 720, 742
Braig K, 896
Braiterman LT, 450, 451
Braithwaite DK, 421
Brakier-Gingras L, 709
Bramhall EA, 730
Bramhill D, 100, 101, 209
Branciforte D, 463
Branda SS, 895
Brandeis R, 591, 592
Brändén C-I, 641
Brändli A, 905
Brandriss MC, 902
Brandt A, 877, 881, 901
Brannigan JA, 744
Branton D, 514, 519
Brasaemle D, 627
Brass A, 848
Bratt G, 280
Brattain KA, 484
Braun BR, 119
Braun F, 178, 183, 184, 187, 188
Braun HP, 869, 892, 895, 904
Braun W, 570, 571
Brauweiler A, 814
Brawner M, 391, 394, 395
Bray D, 797
Bray RC, 236, 247, 250, 258
Brazhnikov E, 648, 683
Brazhnikov EV, 558–60
Brazil D, 484
Breaker RR, 51, 52
Brecher P, 615, 624
Bredenbeek PJ, 136, 144
Breen GAM, 425
Breg J, 214
Breindl M, 447
Breiner M, 494
Breitenberger CA, 414
Bremer H, 145
Brendelberger G, 275
Brennan MB, 894, 896
Brennan RG, 811
Brenner S, 857
Brénot-Bosc F, 66
Brentel I, 223
Bresciani-Pahor N, 308
Breslauer KJ, 556, 559, 562
Breton M, 489
Bretscher MS, 524, 538, 540, 632
Breukink E, 210, 213, 900
Brew SA, 847
Brewer BJ, 145
Brewer CB, 533
Brewer HB, 388, 394, 395, 397
Brewer KA, 496
Breyer D, 767, 769, 774
Brice AE, 763, 774
Brice MD, 642
Brickey D, 811
Brigati DJ, 766
Briggs MR, 626
Bright NA, 512, 516
Brill SJ, 62, 63, 66–68, 72, 73, 78, 80–82, 84, 86, 131, 421
Brimacombe R, 692, 695, 697, 699–701, 709, 711
Brindle P, 811, 812, 815–18, 820
Brink S, 872
Brinkley BR, 66
Brinkley DN, 626
Brinton BT, 62, 75, 77, 358
Briones P, 896
Briskin MJ, 851
Britten RJ, 86, 754, 756, 758, 759, 766
Broccardo M, 339
Brodeur GM, 450
Brodsky FM, 514, 516–19, 521, 523, 525, 527, 528, 530, 532, 533, 536, 537
Brody LC, 291
Broeks A, 466
Broker G, 302
Bromberg S, 571
Bronstein JC, 352
Brookfield JFY, 438
Brooks CLI, 569, 624
Brooks IS, 365, 367
Brophy PJ, 840
Brosius J, 701
Brow MA, 840
Brown AL, 664
Brown C, 894, 895
Brown DD, 130, 763, 774, 776
Brown DG, 374
Brown DP, 110
Brown GG, 420
Brown GW, 62, 64, 66–68, 77, 78, 83
Brown H, 151
BROWN HA, 475–509; 491, 493–99, 501, 646
Brown JW, 193
Brown KL, 279
Brown KO, 484
Brown LG, 777
Brown LM, 66
Brown MF, 216, 222
Brown MH, 856
Brown MS, 538, 615, 618, 623, 624, 626, 627, 631
Brown N, 451
Brown PO, 443, 451, 458, 465
Brown RS, 24, 73
Brown SA, 140, 153, 154
Brown SM, 355
Brown TA, 47, 373
Brown VD, 151
Brown WE, 422
Brown WJ, 537
Brown WM, 426
Browne KA, 30
Browning BG, 853
Brownson C, 301
Brtva TR, 670
Bruccoleri RE, 366
Bruce CP, 362, 370
Bruch MD, 866
Bruckner RC, 352, 356, 358, 363, 377, 378
Bruening G, 28
Bruice TC, 30
Brun GM, 422
Brunden KR, 840
Bruner DA, 618, 622
Brünger A, 643, 645, 646, 655
Brunger AT, 687
Bruni CB, 179
Brunner J, 213, 726, 877, 882
Brunner M, 885, 888–90, 892, 893
Brush GS, 63, 66, 77, 80, 85
Brustovetsky N, 215
Brütsch H, 877, 881
Bruzel A, 583
Bruzik KS, 480, 499
Bubis J, 667
Buc H, 139
Buchanan SK, 722
Buchberger A, 887
Bucheton A, 455, 462
Buchmann GW, 338
Buckel W, 271, 275, 285, 291, 296, 297, 299–302
Buckley CD, 853
Bucklin DJ, 696, 703, 704
Buckwalter MS, 458
Budavari AI, 587
Buechler YJ, 812
Büeler H, 400
Buhanan SK, 727, 728
Bujard H, 130
Bukau B, 887, 895
Bukhari AI, 441
Buldyrev SV, 395
Bulinski JC, 789
Bullard JM, 696, 703, 704
Bullock P, 63, 78, 79
Bullock TL, 480
Bullough DA, 721, 729
Bult CJ, 112
Bulygin VV, 741, 797
Bunker CA, 130, 154
Burakoff SJ, 856
Burbaum JJ, 23
Burdick D, 387, 390, 391
Burdick DA, 404
Burgard A, 723
Burger MM, 317, 325, 326
Burgers PMJ, 77
Burgess CC, 534

Burgess D, 458
Burgess WH, 147
Bürgi H-B, 308
Burgstaller P, 24, 32
Burke B, 320
Burke JF, 236, 255
Burke JM, 29
Burke WD, 461
Burmeister M, 120, 145
Burnberg NC, 808
Burnier J, 671, 672
Burns DJ, 201, 204, 208, 210, 226, 496, 500
Burns JL, 73, 74
Burns RG, 99
Burny A, 814
Burova E, 124
Burr B, 457
Burrone OR, 317
Burt WJ, 895
Burton P, 95
Burton ZF, 147, 148
Busby S, 139
Busby TF, 847
Buser CA, 211
Bush AI, 392, 398
Bush M, 371, 372
Bushman FD, 447, 448, 467
Bustin M, 154
Butcher EC, 851
Buten B, 5
Butler D, 445
Butler JD, 629
Butow RA, 425, 428, 430, 464
Butt TR, 558
Buzayan JM, 28
Bychkova VE, 559, 560
Byeon MK, 834
Byers DM, 617, 624, 629
Byers MJ, 771
Byrne MC, 780

C

Cabacungan E, 202
Caboche M, 457
Cabot MC, 492, 499
Cabral G, 351, 352
Cadena DL, 321
Cadigan KM, 615, 617–19, 623, 626, 629, 634
Cadwallader K, 492, 494, 495, 497
Caggese C, 452
Cahill GF, 593
Cahill SM, 211, 481
Cai H, 157
Cai SX, 741
Cai Z, 24
Cairns SS, 418
Caizzi R, 452
Calabrese JC, 480
Calalang CC, 461
Calder JM, 356, 363, 364, 371
Caldwell JW, 563, 568
Calendar R, 142
Callen JC, 421
Calnan BJ, 24
Calvaruso G, 330
Calvi BR, 455, 457
Camargo E, 136, 144
Cameron DK, 584
Cammack N, 355, 367, 368
Camoratto AM, 489
Camp LA, 657, 669
Campbell AP, 770, 771, 774
Campbell FE Jr, 124, 130
Campbell GA, 900
Campbell ID, 843, 845, 846, 855–57
Campbell RD, 151
Campbell WH, 256
Campbell-Burk SL, 646, 652, 655
Campeau E, 291
Camps M, 480, 484, 486
Cannata JJ, 298
Cannons AC, 256
Cantatore P, 418, 421
Cantley LC, 493, 525, 540, 664
Cantoni R, 185
Cao C, 96, 107, 108
Cao G-J, 177, 179, 181, 183–86, 188, 189, 618, 728
Cao H-t, 492
Cao L, 386
Cao W, 877, 879, 882, 899
Cao X-J, 275
Cao Z, 393, 399, 590, 592
Capaldi RA, 719, 720, 723, 724, 727, 732, 741, 742, 796
Capasso JM, 318, 323
Capel MS, 691
Capitani S, 201
Capitanio N, 897
Caplan AJ, 873, 874
Caplow M, 789
Capone JP, 130
Caradonna SJ, 373, 374, 427
Cardillo TS, 899, 900
Cardinale GJ, 296
Cardoso MC, 66
Careche M, 582, 585
Carland F, 457
Carle GF, 450
Carlemalm E, 391, 397
Carlomagno MS, 179
Carlson M, 154
Carlsson J, 766, 768
Carlstedt-Duke J, 590, 591, 594
Carman GM, 201, 205, 208, 483, 499
Carmena M, 452
Carmichael EP, 68, 355, 356
Carmillo PJ, 354
Carne A, 478, 480, 481, 485
Carol P, 193
Caron MG, 530, 542, 668, 671
Carozzi A, 484, 486
Carpenter G, 480, 483, 487–89, 500, 525, 541
Carpenter R, 456
Carpentier J-L, 538
Carpousis AJ, 188, 189
Carr NG, 175
Carr TP, 616
Carrasco N, 219
Carrell N, 843
Carreras CW, 32
Carrington M, 461
Carriuolo J, 8
Carrodeguas JA, 421
Carroll D, 461
Carroll K, 532
Carroll RD, 366, 368
Carson E, 478
Carter JR, 77
Carter LL, 528–30, 532–34, 542
Carter M, 655
Carter T, 72, 83, 85, 86
Carter TH, 85
Carty MP, 77, 80, 84
Caruthers MH, 27, 36, 41, 42
Carver JA, 326
Casadaban MJ, 444, 458, 466
Casadesus J, 454
Casaseca T, 500
Case DA, 423, 572
Cases S, 621, 622
Casey PJ, 645, 651, 655, 662, 664, 665, 668, 874
Casjens SR, 97
Cassady AI, 136, 146
Cassar-Malek I, 430
Cassel D, 661
Castilho BA, 444
Castuma CE, 209
Casuto D, 396
Cate JH, 24, 40, 44
Catsicas S, 766, 768
Caughey B, 397, 400–2, 404
Causton HC, 187
Cavenagh MM, 494, 532
Cazenave C, 74
Cech TR, 20, 22, 23, 26, 27, 29, 32, 33, 35, 37, 38, 41, 42, 44, 46–48, 52
Cedergren R, 414
Cekleniak JA, 709
Celander DW, 29, 44
Cepek KL, 832
Cereghini S, 599
Cerione RA, 658, 668, 670, 671
Cermakian N, 414

Cervoni L, 316
Chabbott H, 492
Chabre M, 657, 658, 660
Chacko GK, 627
Chaconas G, 175, 442–44, 448, 459, 460
Chader GJ, 767, 769
Chadwick CC, 525
Chae C-B, 425
Chae HZ, 484
Chafin D, 157
Chaikoff IL, 491
Chakrabarti D, 317, 329
Chakraborty A, 329
Chalifa V, 493, 496, 500
Chalifa-Caspi V, 477
Chalikian TV, 556, 559, 562
Chalker DL, 438, 445, 450, 466
Chalkley R, 583, 596, 601, 602
Challberg MD, 355–58, 363–68, 371, 372
Chalmers R, 440, 442, 445, 446, 449, 454, 455, 458, 460
Chalmers RM, 446, 454
Chamberlain BK, 201
CHAMBERLIN MJ, 117–72; 119–22, 124–28, 132, 136, 157–59, 161, 162
Chambers RS, 148, 156
Chambon P, 136
Chaminade M, 341
Champe M, 851
Champion LE, 462
Chan BS, 448
Chan CL, 120, 121, 123, 126–28, 137, 157, 159–63, 615
Chan DW, 80, 85
Chan HS, 554
Chan L, 618, 619, 622, 634
Chan MK, 234, 237
Chan P-Y, 858
Chan W, 391, 394, 395
Chandler D, 554
Chandler M, 441, 443
Chandrasekhar GN, 895
Chandry PS, 44
Chaney MO, 399
Chanfreau G, 46
CHANG CCY, 613–38; 616–19, 622–24, 627, 629, 631, 632, 634
Chang C-P, 488, 895
Chang DD, 414, 415
Chang F, 94
Chang MP, 523, 525, 532
Chang S-C, 207
CHANG TY, 613–38; 615, 617–19, 622–24, 626, 627, 629, 631–34
Chang YL, 687
Changeux J-P, 43, 625
Chanock RM, 136, 144
Chanson RJ, 242
Chantler PD, 803
Chap H, 489
Chapman ER, 482
Chapman T, 22, 37, 47
Chapon C, 897
Chardin P, 657, 658
Charest H, 619
Charifson PS, 660
Charland J-P, 308
Charters Y, 183, 184
Chartrand P, 355, 368, 447
Chase JW, 62
Chasotte B, 725
Chatterjee M, 329
Chatterjee S, 352, 559
Chattopadhyay A, 329
Chattopadhyay S, 142
Chaumont F, 872
Chayen NE, 389
Chekanova JA, 187, 188
Chelouche AR, 446
Chelstowska A, 430
Chen B, 414
Chen C, 64, 65, 67, 68, 72, 75, 76, 79, 81
Chen C-C, 217, 218
Chen CH, 143
Chen CK, 562
Chen C-L, 480
Chen C-S, 493
Chen DJ, 80, 85
Chen DY, 147
Chen FL, 478
Chen H-P, 308, 633
Chen J, 75, 76, 453, 457, 616, 618, 619, 623, 629, 631
Chen JL, 816
Chen JY, 871
Chen LB, 371, 372
Chen LH, 291
Chen L-M, 278
Chen L-S, 291
Chen M, 63, 67
Chen MS, 374, 534
Chen P-H, 77
Chen Q, 521, 525
Chen RO, 692, 693
Chen TBRA, 280, 449
Chen W-J, 538, 889
Chen YH, 131, 141
Chen Y-R, 85, 157
Chen Z, 136
Chen ZG, 740
Chen Z-Q, 291
Chenchik A, 770, 771, 774
CHENG D, 613–38; 616, 618, 619, 622–25, 631
Cheng H-F, 480, 483
Cheng MY, 894, 895
Cheng S, 779
Cheng W, 634
Cheng YC, 365, 368, 371, 373
Chen-Hwang MC, 654
Chen-Kiang S, 136, 144
Cheong C, 24, 27, 687
Cherepanov PA, 491
Cheresh DA, 847
Cherfils J, 554
Chesebro B, 401
Cheung R, 479, 480, 482
Chevalier G, 329, 330
Chevrier MR, 316, 317, 324–26
Cheyette TE, 601
Chiarini F, 340, 341
Chibazakura T, 147
Chich JF, 884
Chiche L, 565, 566
Chin C, 462
Chin HH, 853
Chin J, 30, 629, 631
Chinsky JM, 136
Chiou HC, 364, 367, 368, 370
Chirgadze IN, 558
Chirgadze Y, 648, 683
Chirico WJ, 873
Chiu HH, 853
Chiu KC, 596
Chiu SK, 440
Cho C-G, 386, 388, 390, 391, 394, 399
Cho M, 616
Cho R, 80
Choi DJ, 131, 141
Choi WC, 485
Chomym A, 864
CHOTHIA C, 823–62; 552–57, 562, 574, 825, 828, 833, 842, 856–58
Chou C-F, 316, 317, 324
Chou CH, 811
Chou J, 352
Chou T-Y, 316–18, 321–23, 329, 331
Chow CS, 364, 366, 367
Chow EP, 517
Chow SA, 448, 467
Chrapkiewicz NB, 583
Christ B, 584
Christensen B, 291
Christian EL, 28
Christiansen J, 711
Christiansson A, 203, 222, 223
Christie GE, 142, 179
Christie KR, 123, 132, 149
Chrivia JC, 817, 819
Chu CT, 355
Chu D, 518
Chu DH, 650
Chu S, 417
Chuang WJ, 721

Chun SY, 212
Chung C-Y, 847
Chung DS, 392, 394, 395, 397, 398
Chung H-H, 660
Chung IK, 371
Chung J-K, 498
Chung SY, 568
Chupin V, 214, 867
Chupin VV, 224
Church C, 897
Churchward GG, 441
Ciaranello RD, 763, 774
Ciesiolka J, 697
Cifuentes ME, 481, 483, 490
Cimbala MA, 585
Cipres-Palacin G, 149
Cisek LJ, 322
Citron M, 387
Clancey CJ, 207
Clapham DE, 665
Claret FX, 817, 818
Clark BFC, 640, 641, 643, 655
Clark DJ, 130, 450
Clark JD, 482
Clark JM Jr, 296
Clark KL, 669
Clark MA, 501
Clark R, 663
Clark-Walker GD, 464
Claude A, 63, 79
Claus-Walker D, 365, 366
CLAYTON DA, 409–35; 41, 151, 412, 414–17, 419–22, 425
Clayton RA, 111, 185, 275
Clayton RB, 622
Cleary ML, 899
Cleland WE, 257, 258
Cleland WW, 33, 47, 301
Clements JB, 375
Clements JM, 853
Clerget M, 142
Clericus M, 904
Clertant P, 74
Cleveland DW, 317, 325
Clifford J, 136, 146
Clore GM, 558
Clouthier DE, 588, 589, 592, 601
Clugston CK, 73
Coadwell J, 832
Coburn GA, 187, 189
Cocco L, 201
Cochet C, 488
Cock JM, 236, 255
Cockcroft S, 476, 490, 492–94, 496, 497, 501
Codina J, 662, 666, 667
Codogno P, 316, 317, 322
Coen DM, 350, 355, 364–68, 370, 374, 456
Coen ES, 456
Coffin JM, 439, 447, 458
Cohen A, 107
Cohen CK, 317, 318
Cohen DI, 759, 761, 766, 774, 776, 778
Cohen FE, 539, 553, 554
Cohen H, 584, 587, 588, 591, 592, 600–2, 604, 605
Cohen P, 325
Cohen SN, 183, 184, 186, 187, 452, 466
Colapietro A-M, 542
Cole RN, 316, 317, 321, 323, 325
Cole TJ, 606
Coleman DE, 643, 649, 650, 657, 658, 665, 666, 669
Coleman PS, 722
Collat JW, 278
Collawn JF, 538–40
Colley KJ, 328
Colley N, 207, 490, 491
Collinge DB, 875
Collins CA, 534
Collins FH, 461
Collins FS, 463
Collins JF, 107, 183, 194
Collins KL, 77–79
Collins PL, 136, 144
Collins RA, 22
Collinson IR, 727, 728
Colloms MD, 183, 184
Colman DR, 829, 831, 840, 842, 843
Colombatti A, 848
Colombi MI, 532
Colón W, 559
Comarmond MB, 24
Comb M, 808
Come JH, 401
Comer FI, 316, 318, 322, 324, 330, 331
Comley ME, 629
Conaway JW, 119, 121, 124, 125, 147, 156
Conaway RC, 119, 121, 124, 125, 147, 156
Concha NO, 482
Condit RC, 136, 143, 144
Condon C, 137, 152
Condron R, 895
Cong P, 144
Conibear E, 524
Conicella C, 491
Conklin BR, 671
Conley AJ, 355
Conley K, 517, 518
Conn MM, 24, 50
Connell GJ, 30, 32
Connelly S, 130
Conner J, 375
Connolly CM, 450, 451
Connolly ML, 553
Conrad PA, 632
Conricode KM, 496
Consler TG, 220
Constantine KL, 845
Conter A, 97
Conway MC, 420
Cook HW, 617, 624, 629
Cook JS, 583, 599
Cook KH, 561
Cook RA, 903
Cook SJ, 655
Cook WR, 95, 106, 107
Cooke R, 795
Cool RH, 654, 663
Cooley L, 456
Coombs MM, 426
Cooney AM, 627, 629
Cooper A, 558, 559
Cooper GM, 659
Cooper J, 375
Cooper J, 375
Cooper PG, 326
Cooper TG, 62, 73, 86
Cooperman BS, 30, 701, 711
Copeland WC, 424, 430
Corbi AL, 848, 851
Corbo JC, 109
Corda Y, 121, 131, 141
Corden JL, 321, 322
Corder EH, 394
Cordes EH, 12
Cordes V, 320
Cordingley MG, 364, 367
Corey DR, 43
Corin AF, 900
Cornelius P, 605
Cornell RB, 206
Correa PE, 565
Correll CC, 626
Corrie JET, 643, 654, 655, 662
Corsi R, 339–41
Corvera S, 525, 542
Cosentino G, 375
Cossart P, 179
Costa PR, 387, 389, 390, 396, 404
Cotman CW, 390, 391
Cotter RJ, 316, 317, 324–26
Cotterill S, 64, 68, 77
Cotton FA, 41
Coucouvanis D, 236
Coulombe PA, 324
Coulson AR, 410
Coulter DE, 124
Courchesne WE, 664
Court DA, 877, 879, 882, 883, 899
Courtney LF, 279
Courtney RJ, 355
Cove DJ, 237
Covell DG, 569
Covello PS, 903

Coverley D, 62, 66, 79, 85
Cowburn D, 211, 481
Cowling GJ, 767, 768, 774
Cox AD, 670
Cox GB, 726, 740
Cox NJ, 596
Crabtree GR, 450
Craft J, 417, 420
Craig EA, 864, 873, 880, 885, 887–90, 894–97, 901, 904
CRAIG NL, 437–74; 439–42, 449, 452–54, 456, 458–60, 466, 467
Craigie MC, 368, 369
Craigie R, 438, 441–43, 458
Craik CS, 43, 517
Craik DJ, 867
Crain BJ, 394
Cramer SP, 240, 250, 257
Crampton J, 759
Crane AM, 275, 285
Crausaz F, 542
Crawford DR, 597, 598
Crawford NM, 255
Creczynski-Pasa TB, 721, 737
Cregut D, 565, 566
Creighton TE, 558
Creusot F, 900
Crick FHC, 754
Cripe TP, 593, 594
Crippen GM, 572
Crippen K, 291
Crise B, 803
Cristina J, 136, 144
Cromley DA, 619
Cronan JE Jr, 201–3, 225
Croniger C, 600, 604, 605
Croniger CM, 586, 590
Cronin MT, 780
Crook ED, 329, 330
Crooke E, 209, 210
Crooke ST, 477, 479
Crosby JR, 535
Cross A, 364
Cross AM, 371
Cross RA, 803
Cross RL, 719, 721, 726, 729, 730, 733, 741, 743, 797
Crossin KL, 824, 829
Crossley M, 602
Crossley R, 98, 99
Crossley RE, 107, 108
Crosson SM, 590
Crouch DH, 175
Crowe DT, 853
Crowther RA, 325, 514, 515, 519, 538
Crumpacker CS, 355, 366–68, 372
Crute JJ, 356, 358, 362–65, 370
Cruz JA, 739
Cruz LJ, 341
Cruz P, 22
Cubitt AB, 491
Cuendet GS, 599
Cuezva JM, 743
Cui Y, 476
Cuifo DM, 353
Cullen BR, 119, 144, 153
Cullis PR, 222, 223
Cummings MP, 457
Cummings RD, 317, 324, 327
Cumsky M, 868
Cumsky MG, 887, 904
Cundliffe E, 706, 711
Cunningham BA, 833, 834, 836, 847
Cunningham D, 721, 729
Cunningham E, 490, 494, 501
Cunningham JR, 275
Cunningham K, 901
Cunningham PR, 708, 709
Cuomo CA, 80, 85
Curcio MJ, 463–65
Curran T, 321
Curthoys NP, 585, 593
Curtin K, 361
Cusack S, 672
Cyr DM, 864, 867, 868, 874, 887, 889, 890, 895, 904
Cyster JG, 852, 854, 855, 856
Czworkowski J, 648, 652, 683

D

Daas PJH, 288
Dabach Y, 632
Daban JR, 130
Dabbs ER, 705, 711, 712
Dabrowski CE, 354, 357
Dabrowski M, 708
Dacey JWH, 242
Daddabbo L, 418
Daegelen D, 136
Daga A, 151
Daggett V, 551
D'Agostino MA, 419
Dahl CE, 365, 367, 392
Dahl NK, 627, 632
Dahlback B, 391, 397
Dahlberg AE, 680, 706, 707, 709, 710
Dahlberg JE, 153
Dahlquist FW, 553, 724
Dahlquist KD, 698
Dahm SC, 27, 28
Dahmus ME, 119, 148, 155, 156, 316, 317, 321, 322
Dai J, 794
Dai K, 96–99, 104
Dai P, 818
Dai X-C, 24
Dai X-P, 845, 846
Dairaghi DJ, 414, 416, 419, 420, 423
Dalakas MC, 426
Dalbey RE, 903
Dale JW, 457
Dallas A, 687
Dallmann HG, 724, 742
Dalman HM, 671
D'Alonzo JS, 659
Dalrymple MA, 355, 356, 363, 364, 372
Daly JW, 499
Daly R, 488
Dam M, 708
Damian RT, 317, 327
Damke H, 513, 532, 534, 535
Dammel C, 706, 707
Dammel CS, 707, 709
Dana SE, 615, 623, 624, 627
Danaricu I, 615
Dance GSC, 187
Dandekar T, 569
Dang CV, 316, 317, 322
Dang N, 395
Daniel LW, 492, 499, 500
Danilevskaya ON, 462
Dann MS, 739
Danon F, 317
Danpure CJ, 871
Dao NN, 726
Dapice M, 800, 801
Darby G, 368
Darby NJ, 558
Darden TA, 660
D'Ari R, 96, 106
Darling A, 375
Darling AJ, 375
Darlington GJ, 586, 590, 606
Darnell RB, 512, 516
Darst SA, 148
Darzins A, 458
Das A, 126, 133, 149, 157, 162
Das S, 388, 394, 395, 397
Das T, 490
Das Gupta J, 192
Dasgupta S, 106
da Silva AC, 897
Datta B, 317, 329
Datta P, 275, 281
Datta SK, 211
Daum G, 864, 870, 887
Daumerie CM, 626, 633
Dause RB, 227
Dauter Z, 242
Dautry-Varsat A, 542
Dauvin C, 590–92
Davenport PA, 666
David C, 534, 535
David CW, 552, 566
Davidson EH, 86, 754, 758, 759

Davidson HW, 537
Davidson N, 652, 653, 754
Davies A, 374
Davies C, 687
Davies DR, 441
Davies EA, 856, 857
Davies GJ, 242
Davies JE, 680
Davies RW, 47
Davila-Aponte JA, 22, 23, 46
Davis AF, 417, 424, 425
Davis AS, 99
Davis DG, 330
Davis ES, 894, 896
Davis G, 851
Davis LI, 317, 318, 320
Davis MM, 759, 761, 766, 774, 776, 778
Davis NG, 542
Davis NK, 275, 298, 302
Davis PJ, 633
Davis RA, 616
Davis RJ, 543
Davis RL, 769, 776
Davis RW, 255, 778
Davis SJ, 854–57
Davison AJ, 350, 351, 356, 372
Davitz MA, 492
Davletov BA, 482, 528
Dawid IB, 776
Dawidowicz EA, 627, 629
Dawson PA, 618
Day CD, 869
Day RS III, 80, 85
Dayton S, 615
Dean C, 457
Dean D, 237
Dean FB, 62, 63, 65–68, 78, 83, 84
Deb SP, 354, 356, 357
De Baere I, 442, 446
DebBurman SK, 481
DeBerardinis RJ, 462, 463, 466
Debnath ML, 386
de Boer PAJ, 95, 96, 98, 99, 106–8
Debonis S, 803
DeBoy RT, 452, 453, 458
de Bruijn MHL, 410
de Bruyn Kops A, 365, 371
DeCamilli P, 525, 534, 535
De Candia G, 418
DeCaprio JA, 147, 817
de Castiglione R, 339, 341
DeChavigny A, 203, 217, 224
Deckelbaum RJ, 618, 622, 626
Deckers-Hebestreit G, 725, 726, 735, 736, 739
de Cock H, 221, 222
deCrombrugghe B, 182
Dedman JR, 482
Dedrick RL, 124, 128, 129
Deeg MA, 492
Deems RA, 208, 483
DeFranco AD, 759, 761
de Frutos PG, 391, 397
DeGaetano D, 317, 318, 321
deGasquet P, 593
de Gier J, 867
Degiuli A, 316
de Graaf MJ, 662
De Graan PNE, 500
De Grado WF, 574
DeGrella RF, 627
de Groot PG, 211
deGroot RP, 811
deHaas PE, 457
Deisenhofer J, 566
Deiss LP, 352
de Jongh HHJ, 214, 900
Dekker PJT, 878, 884–87, 895
De Kleijn DP, 341
de Korte Kool G, 210, 213
de Kroon AI, 214
de Kruijff B, 210, 212–14, 217, 218, 220–22, 224–26, 867, 876, 900
Delaney T, 481
Delapierre D, 767, 769, 774
Delarue M, 551, 564, 565, 567, 568
Delattre M, 456
Delbaere LJT, 583, 584
Delcour J, 448
De Leeuw EP, 341
Delegeane AM, 808
DeLeon S, 85
Delfour A, 339–41, 343
D'Elia D, 418
DeLisi C, 51
Dell A, 317, 325, 326, 329
Dellaporta SL, 453, 457, 467
Della Valle V, 317, 322
del Mazo J, 766, 768
Deloche O, 885, 887, 888, 894, 895
De Loia JA, 776
Del Priore VA, 616, 618, 619, 623, 631
DeLuca NA, 352
DeLuca-Flaherty C, 24, 517, 537
De Maeyer M, 567
DeMarchi JM, 376
DeMaster E, 392, 398
DeMattos RB, 616, 618, 619, 622
Demel RA, 210, 213, 214, 867, 876, 892, 900
de Mendoz D, 202
Demengeot J, 80, 85
de Mercoyrol L, 121
De Mesmaeker A, 24
DeMichele A, 617, 619
DeMoll E, 275, 291, 294
Demolliere C, 512, 513
Den H, 317
den Blaauwen T, 212
Deng H-Y, 681
Deng L, 144
Deng M, 392
den Hertog J, 811
Denissova L, 160
Denker BM, 653
Denman R, 697, 707
Dennebouy N, 421
Denney D, 763, 774
Dennis DT, 895
Dennis EA, 208, 483
Dennis PP, 145, 680
Denniston KJ, 353
DePamphilis ML, 62
DePinho RA, 136
DePonti-Zilli L, 136
Der CJ, 659
Derbyshire V, 365
De Ridder DJA, 308
Derks MWM, 479
Derksen RHW, 211
DeRosier DJ, 796
DeRossi E, 185
Derr LK, 463
Derrick WB, 27
Derse D, 365
Dervan PB, 696, 703
Desai P, 352
Deshaies RJ, 873
Deshpande AM, 145
DesJardin LE, 136
Desjardins P, 419, 423
Desmarais Y, 497
Desmet J, 564, 565, 567
Desrochers D, 556
Dessauer CW, 648, 658, 671
de Steensma HY, 873, 875
DeStefano K, 480, 488
de Swart RL, 212
Deterre P, 486, 660
Deuschle U, 130
Deuter R, 654
Deutsch E, 278, 279, 281
Deutsch J, 456
Deutscher MP, 184
DeVack C, 815, 819
de Vegvar HE, 153
Devenish RJ, 895, 904
Dever TE, 641
deVera A, 120
Devine J, 587, 589, 590
Devine SE, 450, 451, 467
deVos AM, 643, 645, 646, 652, 653, 655, 660, 662
De Vries L, 664
DeVries VG, 621
de Vrije T, 212
DeWald DB, 537
Dewar SJ, 95, 104

De Wit ECM, 626
Dexter TM, 767, 768, 774
Deykin D, 614, 617
de Zamaroczy M, 415
Dezelee S, 134
Deziel R, 375
Dezoysa PA, 871
Dhanasekaran N, 659
Dhand R, 542
Dhar A, 489
Dharmawardhane S, 491
Dhellin O, 463
Dhe-Paganon S, 481
Diakun GP, 250, 271, 296, 300
Dialektake G, 455
Diamond DL, 212
Diamond MI, 592
Diamond MS, 848, 851
Diatchenko L, 770, 771, 774
Dicharry SA, 427
Dickinson CD, 845, 846
Dickinson ES, 851
Dickson G, 834
Diczfalusy MA, 618
DiDonato S, 421
Dieckmann T, 24
Dieckmann-Schuppert A, 317, 327
Diehl AM, 604, 606
Diehl RE, 659
Dietchy JM, 626, 633
Dietmeier K, 864, 877, 879, 880, 881, 885, 890, 891, 894, 898
Dietmeier KA, 877, 881, 882
Dietrich A, 484
Dietrich N, 275
Dietschy JM, 615, 633
Diez E, 492, 499
Diffley JFX, 414, 425
Digard P, 364, 365, 367
Digits JA, 11
Dignard D, 669
Dihanich M, 899
Dikstein R, 147
Dill KA, 44, 550, 554, 569, 571
Dilley RA, 725
Dillin A, 453
Dilworth MJ, 278
di Mari SJ, 32
Dimitri P, 452
Dimroth P, 736
Din S-U, 62, 66, 68, 84
Dinauer MC, 763
Dincbas V, 684
Ding HF, 154
Ding M, 317, 325
Ding Y, 840
DiPietro A, 732
Dircks LK, 869
Disatnik M-H, 488
DiTusa SF, 367
Dix DB, 684
Dixon DA, 440
Dixon JE, 138, 809
Dixon JL, 616
Dixon K, 77, 80, 84
Dixon M, 282, 286, 291
Dixon RAF, 355, 659, 671
Dmitriev OY, 735, 736
Do Amaral L, 12
Dobberstein B, 212–14, 864, 868, 872
Dobson CM, 558, 559
Doda JN, 422, 427
Dodd SW, 216
Dodds DT, 533
Dodson EJ, 856
Dodson GG, 242, 855
Dodson M, 78
Dodson MS, 356, 358, 363, 364, 368
Doering CH, 622
Doersen CJ, 410
Doetsch PW, 131, 141, 160
Doherty P, 834
Dohlman HG, 664
Dohme F, 707, 711
Döhren HV, 175
Dokudovskaya S, 695, 699
Dola CP, 500
Dolan A, 355, 356, 363, 364, 372
Dolan JW, 491
Dolgikh DA, 558–60
Doll RF, 456
Dolphin D, 274, 276
Domaille PJ, 646, 652, 655
Dombroski BA, 462, 463
Domena JD, 427
Donachie WD, 95, 103, 104, 107, 109
Donahue BA, 131, 141
Donahue JP, 126, 138
Donaldson GK, 895
Donaldson J, 498
Donaldson JG, 501
Donaldson LW, 724
Donchenko AP, 356, 363
Dong DL-Y, 317, 320, 322, 325
Dong H, 780
Dong L-YD, 316, 318, 321, 331
Dong Q, 369
Dong S, 308
Doniach S, 559, 561, 569
Donnai D, 836, 838, 839
D'Onofrio M, 317, 318, 320
Donovan WP, 184
Dontsova O, 695, 699
Donzell WC, 515, 523, 527, 528, 530, 632
Doolittle GM, 617, 623, 627, 632, 633
Doolittle MH, 622
Dooner HK, 457, 458, 467
Dopazo A, 104
Döring T, 695, 697, 701
Dornreiter I, 62, 63, 68, 74, 76, 78
Dorsky DI, 366, 372
Dory L, 617
Doty P, 51, 754
Dou C, 731, 732
Doudna JA, 24, 27, 29
Dougherty CA, 99
Douglas MG, 864, 866, 867, 873, 874, 877, 879, 882, 885, 887, 889, 896, 899
Doukov T, 282
Douthwaite S, 701, 708
Dovey H, 387
Dower WJ, 49
DOWHAN W, 199–232; 200, 201, 203–5, 207–10, 212, 213, 217–20, 224, 499
Downes CP, 483
Downey WE, 542
Downing AK, 481, 843, 853, 856
Downs WD, 37, 38
Doyle JP, 840, 842, 843
Dracheva S, 363
Drager RG, 192
Drake D, 458
Draper DE, 687
Drapkin P, 80
Drayer AL, 478, 479
Drennan CL, 273, 276, 278, 283, 285, 288, 291
Dresse A, 767, 769, 774
Drevon CA, 633
Drewes G, 325
Drews G, 175
Dreyer WJ, 665
Dreyfus G, 743
Dreyfus M, 189
Drickamer K, 825
Driessen AJM, 212, 218
Driggers WJ, 426, 427
Driks A, 111
Driscoll PC, 481, 843, 851, 852, 854, 856, 857
Driscoll R, 134, 135
Drissi R, 75
Drobinskaya IE, 730
Drubin DG, 829
Druey KM, 487, 664
Drummond JT, 273, 275, 278, 281–83, 287, 288, 291
Dryden SC, 205
Drygas ME, 879, 891, 899, 900
D'Souza-Schorey C, 532
Du J-S, 836, 838, 839
Du Z, 730
Duan DR, 147
Duarte RO, 251, 257
Dubaquie Y, 894, 895, 901
Dube P, 688, 690, 692

Dubin DT, 191
Dubler E, 237
Dubnick M, 778
DuBois G, 317, 325, 526
Dubois T, 498
Dubos J, 338
Dudani AK, 895
Duden R, 512, 513
Dudgeon TJ, 843, 853
Duff JL, 489
Dufresne C, 421
Duguid JR, 763, 766, 768, 774, 776
Duh FM, 147
Duhaime J, 419
Duhl DM, 906
Dujon B, 47, 428
Duke T, 796, 803
Dumke CL, 486, 664
Dumont ME, 899, 900
Dunbrack RL, 564, 565
Duncan L, 110
Duncan TM, 741, 743, 797
Dunham WR, 288, 290
Dunn DS, 134, 135
Dunn JJ, 181
Dunn SD, 724, 727, 742, 796
Dunn TL, 136, 146
Dunn WA Jr, 626
Dunon-Bluteau DC, 422
Dunwoodie SL, 776
Dupuis A, 728, 732
Duquerroy S, 554
Dura J-M, 456
Durand J, 500
Durand R, 191, 583
Durbin R, 556, 558
Duronio RJ, 668
Durrum EL, 7
D'Urso D, 840
D'Urso G, 85
Duschesnay P, 191
Dustin ML, 853–55, 858
Duszynski J, 738
Dutch RE, 352, 354, 362, 377, 378
Dutta A, 62, 64, 65, 67, 68, 72, 75, 76, 79, 81, 83–86
Dwarki VJ, 809, 810
Dwek RA, 330
Dwivedi U, 256
Dwyer NK, 627, 629
Dyda F, 441
Dyer JH, 491
Dynan WS, 80, 85
Dynlacht BD, 816
Dyson HJ, 560

E

Earnshaw DL, 358
Eaton WA, 389, 393, 399, 562
Ebbole DJ, 138
Ebel RE, 731
Eberle AN, 449
Eberle W, 539
Ebert SN, 371
Eccleston JF, 654, 659, 663
Echols H, 78, 896
Eck MJ, 481
Ecker A, 275
Eckermann DJ, 701
Eckerskorn C, 877, 879, 880, 882, 898
Eckman C, 387
Eckner R, 817, 819
Eckstein F, 22, 26, 33, 37, 46, 48
Economou A, 212, 213
Eddy SR, 828
Edel CM, 729, 732
Edelman GM, 824, 829, 833–36, 847
Edelsbrunner H, 552
Edenharter E, 477, 478
Edgerton ME, 624
Edmonds M, 175, 183
Edmondson DE, 240
Edwalds-Gilbert G, 151
Edwards AM, 69, 71, 120, 121, 123, 132
Edwards CH, 302
Edwards CP, 851
Edwards G, 488
Edwards PA, 626
Efstathiou S, 351
Efstratiadis A, 771
Egan RW, 492, 499
Egebjerg J, 711
Egger R, 339, 341
Eggleston AK, 440
Eggleston WB, 442, 456
Egly JM, 144
Ehler LL, 730, 733
Ehmann B, 877, 878, 880
Ehrenberg M, 684, 685
Ehretsmann CP, 188, 189
Ehrlich SD, 185
Eichelberg K, 743
Eichinger DJ, 451
Eick D, 136
Eickbush DG, 461
Eickbush TH, 440, 460–64, 466
Eide D, 446
Eiglmeier K, 457
Eigner J, 754
Eilers M, 214, 889, 891
Einarsson K, 618
Einbinder E, 130
Einerhand AWC, 86
Eisen HN, 776, 777
Eisenberg D, 568, 569, 572
Eisenberg E, 522, 537
Eisenberg F, 499
Eisenberger CL, 588, 592, 601
Eisenger HJ, 291
Eisenhaber F, 566, 567
Eisenmenger F, 564, 565, 567, 568
Eisenstadt JM, 428, 429
Eiserling F, 378
Eisfelder BJ, 650
Eistetter H, 831
Ekaterinaki N, 449
Ekena K, 536
Eki T, 77–79, 86
Ekins N, 626
Ekland EH, 49, 51
Elbein SC, 596
Elber R, 567
el-Deiry WS, 767, 774, 776
Elder RH, 420
Eldin S, 11
Eli Y, 491, 499
Elias P, 354–58, 362, 365, 367–69, 371
Elias-Arnanz M, 72, 75, 80
Eliasson R, 278, 288
Eliezer D, 561
Elion GB, 375
Eliseikina IA, 687
El Khoury J, 386
Ella KM, 491
Elledge SJ, 85
Ellington AD, 23, 32
Elliott CM, 495
Elliott EJ, 106
Ellis MV, 480, 481
Ellis RJ, 218, 895
Elöve GA, 559, 561
Elrod-Erickson MJ, 513
Elsom VL, 834
Emerick VL, 47
Emerson SD, 655
Emmermann M, 869, 872, 892, 895, 904
Emori Y, 478, 488, 490
Emr SD, 525, 534, 536, 537, 879
Emtage JL, 884, 885
Endo A, 632
Endo T, 214, 866, 872, 873, 877–80, 883, 885, 887, 891, 894–96, 899
Enea O, 556
Enemark JH, 236, 257, 258
Engebrecht J, 477, 491, 493
Engel JD, 602, 829, 833, 843
Engelbrecht S, 728, 742, 796, 802
Engelman A, 441, 442
Engelman DM, 691
Engels WR, 439, 442, 452, 455, 456
Engh R, 234, 237, 240, 247, 249
Englander SW, 558, 559, 561, 574
Engler JA, 317, 325, 326

English D, 476
Enns CA, 541
Enquist W, 353
Enslen H, 811
Entelis N, 864
Entelis NS, 864
Entian KD, 338
Epe B, 426
Erdemir T, 697
Erdile LF, 62–64, 67, 68, 74, 76–81, 84
Erdjument-Bromage H, 897
Erdmann VA, 680
Erfle JD, 296
Erickson HP, 99–101, 788, 834, 836, 847
Erickson JW, 658
Erickson SK, 616, 619, 624
Ericson G, 709
Ericsson M, 341
Erie DA, 121, 133
Erikson AC, 895
Eriksson A, 892
Eriksson S, 391, 397, 687
Ermolaeva MV, 671
Ernst JF, 899, 900
Errington J, 110
Ershov YV, 491
Erspamer V, 339–41, 344
Esch F, 387
Eschenmoser A, 290
Escribá PV, 226
Escribano JR, 424
Esekogwu V, 539
Eskes R, 440, 464, 465
Esler WP, 392, 395, 398
Espesset D, 905
Espinosa R III, 596
Espiritu M, 430
Espositio RE, 491
Essen L-O, 479, 480, 482
Essenberg MK, 271, 301
Estes MK, 666, 667
Estevez VA, 525
Etchebest C, 563–65
Etheredge JL, 430
Eufemi M, 316
Evans E, 787
Evans JE, 317
Evans JW, 80, 85
Evans KC, 388, 390, 391, 394, 399
Evans L, 533
Evans MCW, 271, 296, 300
Evans MJ, 430
Evans PA, 559
Evans PR, 687
Evans RM, 633, 817, 818
Evans T, 666
Evans WH, 630
Evelegh MJ, 375
Even-Ram S, 872
Ewel C, 671
Ewen ME, 817
Ewy RG, 725
Exinger F, 138, 149
Exton JH, 477, 479, 484, 486, 492, 495–97, 501, 664

F

Faber S, 601
Facello M, 552
Fäcke M, 424
Facy P, 316
Faerman CH, 22
Fagard R, 538
Fagerberg K, 630
Fahnestock SR, 711
Fairbrother WJ, 43
Fairman MP, 62, 63, 65, 66, 68, 84
Falck JR, 521, 525
Falck-Pedersen E, 151
Falconieri Erspamer G, 339, 340
Falkenberg M, 357, 368, 369
Famulok M, 24, 32
Fang F, 62, 64, 84, 85
Fankhauser C, 866
Fankhauser H, 477, 478
Fanning E, 62, 63, 68, 74, 76, 78
Fanning TG, 461
Fannon AM, 829–33
Fanti L, 452
Faraci WS, 342
Farber FE, 355, 371
Farber G, 270, 286, 307
Farber GK, 480
Farese RV Jr, 622
Farnet CM, 458
Farnham PJ, 157
Farooq S, 290
Farquhar MG, 664
Farr CL, 421
Farr GW, 99
Farrar JA, 237
Farrell KW, 99
Farrell LB, 904
Fattori E, 603
Faugeron-Fonty G, 415
Faulkner P, 317, 326
Faurobert E, 657, 658
Fauser C, 833
Faust JR, 617, 627
Fauvarque M-O, 456
Favot P, 136, 146
Favreau MA, 583
Fawcett J, 851
Fawl R, 350, 354
Fawzi AB, 651, 652
Fay PJ, 77
Fearnley IM, 722, 727, 728
Feaver WJ, 156
Febbroriello P, 110
Federoff N, 455
Fedor MJ, 22, 23
Fee JA, 307, 479
Feher VA, 560
Fehringer P, 618
Feifel B, 888, 890
Feigelson P, 758–60
Feigon J, 24
Feldan P, 371
Feldmaier-Fuchs G, 423
Feldman D, 582
Feldman RI, 730, 737
Feldmann H, 897
Feldmar S, 457
Feldstein PA, 28
Fellous A, 793
Felsenfeld G, 130
Feng G, 120, 123, 128, 157, 159, 160, 163
Feng GH, 157, 159, 160, 162
Feng J-F, 490
Feng J-N, 439, 442, 449, 459, 460
Feng Q, 462, 463
Feng Y, 743
Feng Z, 741
Fenn WO, 795
Fensome A, 490, 493, 494, 501, 644, 646, 647, 653
Fenton WA, 275, 285, 895, 894, 896
Feramisco JR, 809, 810, 812, 815
Ferat JL, 463, 464
Ferguson DE, 858
Ferguson KM, 479, 481, 483, 650, 651, 658
Ferguson LM, 858
Ferguson SJ, 241, 725, 734
Ferguson SSG, 530, 542
Ferland LH, 808
Fernald AW, 488
Fernandez B, 492, 499
Fernandez CL, 711
Fernandez-Busquets X, 130
Ferrandiz M-J, 104
Ferrari E, 77
Ferrari ME, 65, 69
Ferraro A, 316
Ferreri K, 816–18
Ferrero I, 904
Ferrone FA, 393, 399
Ferry JG, 275, 294
Fersht A, 22, 23, 25, 31
Fersht AR, 551, 558
Fesik SW, 481
Feuerstein J, 650, 651, 654, 659
Fevre F, 884
Fevre M, 583
Fiebig KM, 571
Field FJ, 616, 633
Field HJ, 368

Fielding CJ, 633
Fielding PE, 633
Fields BA, 825
Fields BN, 348
Fields C, 762
Fields TA, 664, 668
Fierer DS, 356–58, 368
Fierke CA, 6, 22, 23, 29, 30, 44, 52
Fiermonte M, 739
Filatov D, 375
Filho MDS, 872
Filhol O, 488
Filipowicz W, 417
Fillingame RH, 719, 724, 725, 735, 736
Fimmel AL, 740
Finazzi D, 501, 532
Finch JT, 24, 514, 515
Findley SD, 457
Finegold M, 590, 602, 606
Finer JT, 787
Fink AL, 558–60, 895
Fink DL, 692, 693
Fink GR, 320, 870
Fink JS, 808–10
Finke RG, 272, 307, 308
Finkel T, 659
Finkelstein AV, 554, 558, 574, 828
Finlay DR, 319
Finnegan DJ, 455, 462, 466
Finnegan MG, 237
Finney JL, 307, 552, 553
Finnie NJ, 80, 85
Fiol C, 811
Firmenich AA, 72, 75, 80
Firshein W, 209
Firtel RA, 491
Fischer B, 237
Fischer EH, 331, 500
Fischer J, 24
Fischer K, 869
Fischer R, 275
Fischer WD, 107, 218
Fischer WH, 809, 811, 815, 817
Fischer-Dzoga K, 615
Fishel R, 62, 81
Fisher BL, 368
Fisher FB, 374
Fisher LM, 584, 599, 600
Fisher P, 64, 67, 68, 83
Fisher RF, 126
Fisher RP, 414, 425
Fisher T, 818, 819
Fitin AF, 729–31
Fitzgerald MC, 398
Fitzgerald MS, 77
Fitzgerald-Hayes M, 477, 478
Flaherty KM, 24
Flanagan J, 896
Flanegan JB, 29
Flavell AJ, 457
Fleischmann RD, 185, 275
Fleming KG, 556, 562, 574
Fletterick RJ, 795
Flick JS, 477
Floeckner H, 572
Flor PJ, 29
Flores AI, 743
Flores I, 500
Flores O, 148, 322
Flores TP, 566
Florin EL, 787, 788
Flory PJ Jr, 424
Flugge UI, 869, 872
Flynn TG, 724, 742
Foa PD, 600
Focesi A, 298
Focher F, 373
Fockler C, 779
Fodor SPA, 49, 780
Foelsch H, 869, 906
Fogelman AM, 617
Foley CK, 660
Follettie MT, 780
Folmer RHA, 71
Fomenkova N, 687
Fomukong NG, 457
Fong HKW, 651, 662, 665, 666
Fong TM, 671
Fontecave M, 288
Foran DR, 422
Forbes DJ, 319
Forceille C, 767, 769, 774
Ford SJ, 558, 559
Forest C, 589, 591
Forest CD, 591, 594
Forgac M, 743
Formosa T, 378
Fornwald J, 391, 394, 395
Fors L, 839
Forster AC, 766, 768
Forte CP, 851
Foster DA, 498
Foster MA, 278
Fotedar R, 62, 66, 85
Foulkes NS, 606, 809, 813, 814, 816
Foundling SI, 147
Fourmy D, 687, 688, 698
Fournier M-C, 513, 521, 525, 539
Fournier RE, 601
Foury F, 420, 421
Fowler B, 291
Fowler S, 615
Fowlkes DM, 488
Fox CA, 190, 453
Fox J, 853
Fox TD, 428, 707, 710, 905
Foygel K, 559
Fracasso F, 418
Fralick JA, 209
Frame MC, 356, 364, 372
Francalanci F, 298
Franceschi F, 680
Franceschi FJ, 705, 711, 712
Francis GJ, 371
Francis R, 796
Franckhauser S, 589, 591
Franco M, 498
Franden MA, 77
Frank J, 688, 689
Franke WW, 324
Frankel AD, 24
Frankel P, 498
Franken SM, 643, 652, 654, 655, 660, 662
Franklin I, 455
Franklin T, 726, 743
Franks F, 554
Fransen E, 839
Franzen LG, 872
Franzetti B, 193
Frappier L, 69, 71
Frasca V, 279–81
Frasch WD, 722
Fraser CM, 111, 185
Fraser PE, 401
Fraser-Smith EB, 375
Frauenfelder H, 555
Frausto da Silva JJR, 30
Frech M, 643, 651, 652, 655, 660, 663
Freeborn BR, 691
Freeman DA, 627, 632
Freeman J, 317, 323
Freeman KB, 868, 869
Freeman L, 136
Freeman-Emmerson C, 424
Freemont PS, 41
Freer S, 492
Freier SM, 36, 47
Freissmuth M, 650, 661
French S, 145
Frenkel N, 352, 353
Fresco J, 24
Fresco JR, 51
Freund CL, 517, 518
Freund SMV, 828
Frey AB, 840
Frey PA, 33, 271, 301
Fricke R, 684
Fridell RA, 144
Fried LM, 80, 85
Friedberg EC, 79, 141, 373, 427
Friedman AM, 83
Friedman JE, 594–96
Friedman JM, 41
Friedman P, 500
Friedman RA, 22
Friedmann A, 350–52
Friedmann T, 355
Friesen JD, 138, 149, 157

Friesner RA, 569
Fritz-Wolf K, 644, 646, 653
Frodsham P, 330
Froehlich M, 317, 325, 526
Fröhli E, 326
Frohman MA, 477, 491, 493
Frolov A, 633
Fromme P, 726, 729, 737
Froschauer R, 572
Frot-Coutaz J, 316
Fruh K, 836, 837
Fry MJ, 542
Fryer P, 871
Fuchs E, 324
Fuchs G, 275
Fuchs RP, 131, 141, 629
Fuentes GM, 77
Fuisz RE, 593
Fujii K, 278, 281
Fujiki M, 876
Fujimoto K, 340, 341, 343
Fujimoto S, 179
Fujisawa T, 560
Fujisawa Y, 340
Fujita T, 341, 343
Fujiwara H, 462
Fujiwara T, 458
Fukamizu A, 818. 819
Fukuchi K, 395
Fukui T, 480
Fukumoto Y, 482
Fukushima A, 779
Fukushima H, 396
Fuller JQ, 298
Fung BK-K, 658, 667
Funnell BE, 362
Furlong CE, 395
Furman PA, 355, 367, 368, 370
Furneaux H, 65, 66, 68, 77, 79, 81, 82, 84
Furth PA, 608
Furuya S, 868, 875
Fushman D, 211, 481
Fusswinkel H, 457
Futai M, 719, 721, 724, 726, 729, 730, 738, 739, 742
Fytlovich S, 901

G

Gabay L, 192
Gabbay KH, 599
Gabbay RA, 595
Gabel CA, 317
Gabel SA, 330
Gabellieri E, 739
Gabilondo AM, 542
Gabriel A, 456, 461, 462
Gadaleta G, 418, 420
Gadaleta MN, 418, 421
Gage F, 818, 819
Gagnon GC, 447
Gagnon J, 542
Gaidarov I, 521, 525
Gaikwad AS, 887
Gaisne M, 900
Galan JE, 743
Galanis M, 895, 904
Galau GA, 758, 759
Galcheva-Gargova Z, 543
Galeano NF, 626
Galivan JH, 278, 281
Gallagher JJ, 626
Gallant JA, 121
Gallego C, 650
Gallego F, 130
Galleron N, 185
Galli G, 136
Gallmiche JM, 731
Gallo KA, 342
Gallo ML, 364, 366
Gallo MV, 780
Gallop MA, 49
Galloway CJ, 518
Gallusser A, 213, 516, 520–22
Gamas P, 442, 449
Gambill BD, 885, 887, 888, 894, 895, 901
Gammie AE, 536
Gammon RH, 242
Gampel A, 29
Gamper H, 131, 141
Gamper HB, 157
Gamulin V, 828
Ganesan R, 462
Gangola P, 225
Gani D, 273, 297
Ganser AL, 842
Ganss R, 606
Gao F, 722
Gao GJ, 879
Gao M, 361, 362, 367, 371, 372
Garber DA, 350
Garber M, 648, 683, 686
Garber MB, 686
Garcia EP, 535
Garcia P, 481, 483
Garcia-Aguilar J, 851
Garcia-Higuera I, 667, 669
Garcia-Mena J, 142
Garcia-Ruiz JP, 582, 583, 585
García-Sevilla JA, 226
Gardiner K, 22
Gardiner KJ, 29
Garel T, 559
Garfinkel DJ, 451, 463
Garges S, 139
Garigapati VR, 480
Gariglio P, 136
Garman JD, 424
Garner J, 210
Garr CD, 308
Garrels JI, 895
Garrett JE, 461
Garrett JM, 879
Garrett KP, 147
Garrett PJ, 855, 856
Garrett RA, 680, 701, 707, 708, 710, 711
Garrett RM, 257
Garrett S, 884, 885
Garrett TPJ, 855, 856
Garrison JC, 484, 485, 489
Garritsen A, 667
Garrow TA, 282
Garstka HL, 424
Gärtner F, 877, 880, 901, 904
Gartner P, 275, 289, 294, 295
Garvey WT, 329, 330
Garvey WTG, 329
Gascoyne T, 593
Gaskell PC, 394
Gasser S, 870
Gassman PG, 33
Gatenby AA, 895
Gatter KC, 851
Gatti DL, 896, 897
Gaub HE, 787, 788
Gaudette Y, 375
Gaume B, 894, 895, 897
Gautam N, 648, 666, 667, 671
Gautero H, 498
Gautheron DC, 728, 732
Gavel Y, 220, 895
Gavish B, 556
Gay NJ, 356, 363, 449, 642, 721
Gaylor JL, 617, 627
Gaynor EC, 512, 513
Ge H, 75
Geacintov NE, 131, 141
Gebert S, 814
Geeves MA, 795
Geiduschek EP, 121, 124, 125, 128, 130, 145, 148, 155, 157, 160
Geiger B, 792
Gekko K, 556, 561
Gelb MH, 483
Gelbart WM, 455, 457
Gelep PT, 355, 368, 370
Gelfman CM, 618
Geli MI, 536
Geli V, 884, 892, 895, 905
Gellatly BJ, 552
Gellefors P, 896
Gellert M, 441, 448
Gelles J, 163, 803
Genest Y, 191
Gennis RB, 904
Gentz R, 130
Genuario R, 421
Geny B, 493, 494, 497, 498, 501

Georgaki A, 62, 64, 76, 77, 85, 362
George GN, 247, 257
George M Jr, 426
Georgopoulos CP, 97, 885, 887, 888, 894, 895
Geourjon C, 583
Gerace L, 317, 318, 320, 321, 325, 330
Gerchman SE, 687
Gerdes M, 817
Gerfen GJ, 296, 301
Gerlach WL, 20, 22
Gerlt JA, 33, 52, 342
Germaier H, 902
Germain SJ, 624, 634
Gershon PD, 149
Gerson RB, 684
Gerst JE, 491, 499
GERSTEIN M, 549–79; 552–56, 562, 574
Gertz S, 139
Gervais M, 901
Gesteland RF, 22, 134, 135, 709
Getz GS, 869
Geuze HJ, 512
Gevers W, 338
Geyer M, 660
Geyer PK, 439, 452
Ghambeer RK, 301
Ghanouni P, 131, 149
Gheller SF, 257
Ghilardi JR, 392, 395, 398
Ghim SY, 138
Ghio C, 572
Ghivizzani SC, 418, 419, 422, 425, 426
Ghosh S, 500
Ghrir R, 421
Giam CZ, 814
Gianelos JA, 29
Giardina C, 140
Gibbs E, 85
Gibbs JB, 488, 659
Gibbs JS, 364, 365, 367, 368
Gibson F, 740
Gibson S, 481
Gibson TJ, 481
Gibson W, 317, 321, 324, 326
Gicquel-Sanzey B, 179
Gideon P, 663
Giebler HA, 814
Gierasch LM, 539, 540, 867
Gierl A, 445, 456, 457
Gierschik P, 480, 481, 484, 486
Giese K, 414, 423
Gilbert IU, 62, 63, 68, 74, 76, 78
Gilbert R, 853
Gilbert W, 20
Gilchrist A, 648
Gill GN, 488, 541, 816
Gill SC, 32
Gill SR, 325
Gillard EF, 120, 145
Gillespie CS, 840
Gillespie FP, 428, 429
Gillies PJ, 617, 621, 624, 634
Gilliland GL, 847
Gillman EC, 871
Gilman AG, 66, 484, 485, 487, 494, 641, 643, 646, 648–51, 655, 657–59, 661, 665, 669, 671
Gilman M, 120, 136
Gilman MZ, 809, 815
Gilmanshin RI, 558, 561
Gilson MK, 34
Gindikin VS, 559
Giner A, 538
Ginnan R, 669
Ginocchio CC, 743
Ginsberg HN, 616
Ginther B, 462
Ginty DD, 811
Giralt M, 590, 592
Girard JR, 599, 600
Girault G, 731
Gish G, 487
Gispen WH, 500
Gittis AG, 721
Gjone E, 614
Glabe C, 391, 398, 404
Gladyshev V, 242
Glaser E, 872, 892, 895
Glaser S, 868
Glass CK, 593
Glass RE, 275
Gleason SL, 808
Gleave AP, 466
Gleeson A, 618, 622
Glick B, 410
Glick BS, 864, 885, 887–90, 894–96, 901, 905, 906
Glick JM, 617, 627, 631, 632
Glickman JN, 524
Glitz DG, 699
Glomset JA, 614
Gloor GB, 456
Glorioso JC, 352
Glotz C, 686
Glover TW, 463
Glowacka D, 811
Glusker JP, 270
Glynias MJ, 641
Gnarra J, 147
Gnudi L, 595
Go KJ, 615
Göbel E, 462, 463
Gocayne JD, 111, 185, 778
Godbout R, 80, 85
Goding JW, 317, 327
Godinot C, 732
Godowski PJ, 362
Godzik A, 572
Goebl M, 490
Goedert M, 325
Goff CG, 155
Goff SP, 450
Gogol EP, 723, 741
Golan DE, 858
Gold E, 364, 365, 372
Gold HA, 417, 420
Gold L, 32, 49
Gold LI, 843, 845
Goldberg A, 564
Golden BL, 24, 40, 44–46, 687
Goldenberg DP, 891
Goldfarb A, 122, 125, 127, 128, 132, 133, 143, 148, 149, 155, 157, 159, 160, 162, 163
Goldfarb DS, 319
Goldfine H, 202, 224
Goldie H, 583, 584
Golding BT, 296, 297, 301, 302
Goldman PS, 814
Goldman YE, 795, 796
Goldschmidt D, 884
Goldschmidt–Clermont PJ, 487
Goldsmith EJ, 744
Goldstein DJ, 355, 375
Goldstein JL, 538, 615, 618, 623, 624, 626, 627, 631
Goldstein RF, 565
Golic KG, 456
Gollnick P, 139
Golomb M, 120
Goloubinoff P, 895
Golton IC, 552
Goltz S, 902
Gomes XV, 65, 68, 70, 72, 73, 75, 76, 78, 79, 81, 82, 85
Gomez M, 512
Gonzales DH, 899
Gonzales RA, 478
Gonzalez C, 452
Gonzalez GA III, 809–11, 814, 815, 817
Gonzalez M, 417
Gonzalez SA, 317
Gonzalez T, 851
Gonzy-Tréboul G, 456
Good TA, 398
Goodenow MM, 447
Goodfellow J, 552
Goodfellow JM, 553
Gooding AR, 24, 40, 44
Goodman AD, 593
Goodman CS, 833
Goodman DS, 614, 617
Goodman HM, 462, 808, 809
Goodman MF, 779
Goodman OB, 521, 523, 542

Goodman RH, 808, 809, 811, 817, 819
Goodrich JA, 141
Goodrich LD, 372
Goody RS, 643, 645, 650, 651, 654, 659, 660, 663, 664
Goormaghtigh E, 214
Gopal R, 355, 367, 368
Gopalakrishna Y, 175, 176, 181, 185
Gopalakrishnan V, 22, 30, 37, 40
Goping IS, 877, 878
Goraya TY, 606
Gorbalenya AE, 356, 363
Gordon EM, 49
Gordon JI, 668
Gorenstein DG, 867, 868
Göringer HU, 707, 709, 710
Goris J, 811
Gorski RA, 770, 772
Gossen M, 608
Goto Y-i, 428, 429, 559, 560
Gottesman ME, 124, 142
Gottesman S, 445
Gottlieb E, 151
Gottlieb J, 363, 364, 366, 367
Gottschling DE, 20, 22
Götz F, 338
Goulaouic H, 448, 467
Goulding CW, 282, 289
Goursot R, 415
Gout I, 481, 488, 535, 542
Gower HJ, 834
Goyette P, 291
Gräber P, 726, 729, 734, 737
Graber SG, 484, 485
Grabowski PJ, 20, 22
Graf R, 666, 667
Graham DE, 756, 766
Graham SM, 670
Grahame DA, 275, 291, 294, 295
Gralla J, 51
Grand RJA, 643
Grandbastien M-A, 457
Grandchamp B, 136
Granner DK, 583–85, 587, 589–96, 601, 602
Graslund A, 375
Grassucci R, 688
Grassucci RA, 690
Gratton E, 556
Gratzer S, 877, 878, 880, 882
Grau R, 202
Graveley BR, 132, 151
Graves RA, 587
Gray CP, 353, 490
Gray H, 420
Gray MW, 190, 414, 903
Gray PJ, 131, 141
Gray WR, 341
Graziano MP, 659
Greasley SE, 644, 646, 647, 653
Greco AV, 632
Green FA, 541
Green JB, 22
Green MR, 119, 811, 814
GREEN R, 679–716; 45, 47, 703, 704, 707, 708, 711
Green S, 618
Green SJ, 832
Greenberg ME, 810, 811, 815
Greenberg ML, 201, 205, 207
Greenblatt IM, 453, 457
Greenblatt J, 62, 75, 137, 144, 148, 152
Greene D, 499
Greene LE, 522, 537
Greengard P, 317, 325
Greenleaf AL, 124, 148, 155–57
Greenspan NS, 318
Gregoret LM, 553, 554, 564
Gregory PE, 463
Gregory ST, 707, 709
Greiner R-A, 400
Greis KD, 316–18, 321, 323, 324, 326, 331
Grell E, 732, 738
Grenningloh G, 583, 833
Gresser MJ, 731
Greuer B, 697, 701
Greve' JM, 851
Griffin CA, 67
Griffin K, 744
Griffin RG, 390
Griffith JD, 65, 68, 351, 356, 361, 362, 369, 372, 377
Griffith JS, 400, 401
Griffith LS, 317, 324, 325
Griffith OH, 480
Griffiths DE, 897
Griffiths G, 341, 535, 876, 877, 880–82, 898
Griffiths JM, 387, 389, 396, 404
Griffiths S, 871
Grimmond S, 478
Grindley NDF, 365, 441, 458
Gringauz E, 449, 454
Grinstead LA, 364
Grishko VI, 427
Grivell LA, 884–86
Grob M, 317, 325, 326
Grobler JA, 479, 482
Grodsky NB, 731
Groenen JTM, 442, 466
Gromet-Elhanan Z, 722
Gromoll J, 341
Gronenborn AM, 558
Grönvik K-O, 185
Groom KR, 879
Grosfeld H, 136, 144
Gross CA, 157
Gross E, 338
Gross KH, 553
Gross RH, 767, 769
Grosschedl R, 414, 423
Grosse F, 62, 69, 77
Grosshans C, 24
Grosshans CA, 29
Grossman L, 141
Grotewold E, 457
Groth D, 401
Groth G, 737, 799
Groudine M, 119, 125, 136, 146, 148, 151
Grove JR, 809
Grover NB, 104
Grüber G, 719, 720, 723, 724, 732
Gruber K, 270, 286, 307
Grüber P, 721
Grubmeyer C, 729, 732
Grubmuller H, 788
Gruenberg J, 512
Gruhler A, 839, 901
Gruissem W, 192
Grummt I, 124, 132, 151
Grunberg-Manago M, 183
Grundy FJ, 139
Gruner SM, 223
Grünewald K, 659
Grunicke HH, 489
Grunwald GB, 829
Gruss P, 608
Grzechik KH, 67
Gu C, 63, 67, 72, 73, 81, 82, 84, 86
Gu F, 512
Gu Q, 492, 494, 495, 497
Gu W, 120, 125, 129, 162
Guan K-L, 316
Guarente L, 900, 901
Guarneros G, 187
Gueride M, 421
Guerrieri F, 739
Guerrier-Takada C, 22, 29, 410
Guglietta A, 339, 341
Guiard B, 869, 872, 885, 888–94, 901, 905, 906
Guigues M, 74
Guinebault C, 489
Guise JW, 136
Gulati S, 291
Gumbiner BM, 829
Gundelfinger ED, 583
Gunn JM, 584
Gunn JR, 569
Guo HC, 22, 132, 149, 162, 440, 464, 465, 467
Guo Z, 618
Gupta NK, 317, 329
Gupta R, 481, 483, 692
Gupta RS, 895, 896
Gupta S, 66
Gupta SD, 204
Gupta SK, 650

Gupte SS, 361, 725
Gurevich VV, 542
Gurney AL, 587, 588, 590–92, 597, 598
Guruprasad L, 481
Gustafsson C, 354
Gustafsson CM, 356–58, 368, 369
Gustafsson JA, 590, 591, 594
Gutell RR, 687, 692, 707, 709
Guthrie B, 97
Guthrie C, 48
Guthrie CR, 811
Gutierrez J, 485
Gutowski S, 484, 491, 493, 494, 496, 498, 499, 501, 646
Gutteridge S, 258
Guzder SN, 73, 74, 80, 141
Guzman P, 110

H

Haarr L, 364
Haas RC, 902
Habener JF, 808, 809, 812, 814
Haber JE, 464
Haber MT, 480
Habraken Y, 80, 141
Haccard O, 793
Hachiya N, 869, 873, 875, 882
Hachiya T, 486
Hack E, 872
Hackenbrock CR, 725
Hackney DD, 728, 744, 803
Hada T, 463
Hadchouel D, 606
Haff LA, 192
Haffey ML, 366, 368
Hafner J, 371
Haga T, 484, 486
Hagemann AT, 442
Hagen SS, 562
Hagen TM, 207, 426
Hagens WR, 288
Hagiwara M, 811, 812, 815, 817
Hagler HK, 417
Hagler J, 120, 124, 132
Hagmann J, 317, 325, 326
Hahn WE, 754, 758
Hahne K, 877, 880, 879, 902
Haid A, 891, 899–901
Haimovich J, 136
Haimovitz R, 500
Hain J, 149
Haines SL, 834
Hair A, 136
Hajduk PJ, 481
Hajek P, 889
Hajiseyedjavadi O, 121, 133
Hajjar DP, 633
Hajnsdorf E, 178, 179, 183, 184, 187, 188
Hakamata H, 617, 624, 632
Hakimi P, 590, 592, 597, 598
Hakvoort TB, 900
Halbert CL, 274
Hale SP, 52
Haley JD, 136
Haley NJ, 615
Hall A, 494
Hall CC, 701
Hall FL, 85
Hall J, 361
Hall JD, 364–68
Hall MN, 894, 896
Hall RK, 587, 591
Hallberg RL, 894, 895, 901
Hallermayer G, 876
Hallet B, 448
Halliday KR, 641
Halling SM, 445
Halmi N, 583, 592, 596
Halpern J, 307
Haltiwanger RS, 316–21, 323, 325–27, 330
Halverson KJ, 391, 399
Hama C, 456
Hamaguchi M, 478
Hamajima S, 899
Hamamoto S, 512, 513
Hamatake RK, 77, 364, 367, 369
Hamer D, 770, 772
Hamilton JA, 614
Hamilton RLJ, 616
Hamilton S, 516, 524
Hamlin RC, 845, 846
Hamm DM, 461
Hamm HE, 41, 643, 644, 648, 650, 656–58, 660, 661, 666, 667, 669, 671, 672
Hamm MK, 814
Hammarsten O, 356–58, 367, 371
Hammen PK, 867
Hammer RE, 588, 589, 592, 601
Hammes GG, 741
Hammill SJ, 828
Hammond SM, 492–95, 497, 498
Hampel A, 22
Hampl H, 705
Hampsey DM, 899
Hampson IN, 767, 768, 774
Han FS, 371
Han H, 386, 396, 404
Han J-S, 491, 494, 498, 696, 703
Hanahan DJ, 491
Hanan E, 393
Hanawalt PC, 131, 141
Hand RE, 107
Handa S, 219
Handman E, 317, 327
Hanel AM, 483
Hänggi G, 570
Haniford DB, 446
Hanlon B, 351, 357, 372, 376, 377
Hann SR, 323
Hanna M, 45, 47
Hanna MM, 157
Hannavy K, 864, 885, 894
Hannun YA, 201
Hanover JA, 317–20, 325, 526
Hansbury M, 427
Hansen HAS, 686
Hansen JC, 130
Hansen JN, 338
Hansen LJ, 438, 445, 466
Hansen U, 154
Hanson B, 878
Hanson LC, 895
HANSON RW, 581–611; 582–88, 590–94, 599, 602, 605, 607
Hanspal M, 519
Haque D, 147
Hara E, 767, 769, 774
Harada M, 722, 723
Harbers K, 447
Harbour D, 497
Harbury PB, 565, 567
Harden TK, 478, 483–85
Hardenbol P, 131
Harder SR, 281, 288
Hardesty B, 681, 682, 700
Hardigree AA, 107
Hardin SE, 155, 156
Harding AE, 429
Harding SE, 302, 458
Hardison RC, 136
Hardison WG, 630
Hardwicke MA, 353, 354, 357
Hardy CJ, 556
Hardy CM, 464
Hardy R, 490, 491
Hardy SJ, 212
Harfe B, 739
Hariharan M, 846, 847
Harington A, 871
Harkness TA, 880, 898, 899
Harlan JE, 481
Harless ML, 136
Harley CB, 895
Harlos K, 851, 852, 854–57
Harmey MA, 873, 882, 895
Harms U, 291, 294, 295
Harold FM, 798
Harootunian A, 811, 812, 815
Harootunian AT, 812
Harpaz Y, 552, 553, 556, 562, 825, 828
Harper E, 457
HARPER JD, 385–407
Harper JW, 85
Harrelson AL, 833
Harris ME, 28

Harris N, 149
Harrison DH, 646, 647, 653
Harrison SC, 514, 515, 517, 518, 556, 558, 664, 855, 856
Harrison SM, 776
Harry EJ, 102
Harsh G, 659
HART GW, 315–35; 31, 155, 316–19, 321–26, 330, 331
Hart T, 390, 392, 396, 402
Harte RA, 617, 623
Harteneck C, 650
Harter ML, 817, 819
Hartl DL, 455
Hartl F-U, 537, 864, 871, 872, 885, 887–91, 894–96, 901, 903–6
Hartman DJ, 895
Hartog AF, 729, 732
Hartwell LH, 106
Hartwieg E, 531
Harvey SC, 692, 693
Harvey TS, 829, 831, 843, 845, 846
Hasan MT, 629, 631
Hascall VC, 316
Hase M, 211
Hasegawa Y, 556
Haselkorn R, 51
Haseloff J, 20, 22
Haseltine WA, 458
Hasenbank R, 705, 711, 712
Hashimoto S, 615, 617
Hasin M, 204
Haskard DO, 853
Haslam RJ, 497
Hasselaar P, 211
Hassell JA, 62, 75, 77, 358
Hastie ND, 758, 760, 761
Hasumi K, 632
Hata Y, 559
Hatch GM, 226
Hatch LP, 726, 740
Hatefi Y, 719, 727, 729, 734, 902
Hatta S, 671
Hattori K, 766, 774
Hatzenbuhler NT, 583
Hatzoglou M, 585
Haucke V, 878, 879, 902
Hauer B, 458
Hauge BM, 462
Haugel-Nielsen J, 178, 179, 183, 184, 187, 188
Haughton MA, 720, 723, 741
Hauksson JB, 224
Haurum JS, 330
Hauser C, 457
Hauser PM, 110
Hauswirth WW, 136, 415, 418, 419, 421, 422, 425, 426
Havekes LM, 626
Hawes BE, 489
Hawkins AL, 67
Hawley DK, 120, 124, 125, 128, 129, 132, 143, 144, 148
Hawrot E, 216
Hay BP, 307
Hay J, 355, 359, 368
Hay N, 129, 136, 144
Hay R, 870
Hayakawa M, 426
Hayasaka K, 843
Hayashi J-I, 428, 429
Hayday AC, 776, 777
Haydock K, 29
Hayer-Hartl MK, 896
Hayes BK, 324, 331
Hayes MK, 899, 900
Hayes R, 192
Haymond M, 599
Hayward GS, 353
Hayward WS, 151, 447
Hazard AL, 724
Hazen EEJ, 41
Hazes B, 564, 565
Hazout S, 563–65
Hazuda DJ, 356–58
He B, 138
He DC, 66
He L, 183, 184, 186
He Z, 62, 73, 75, 76, 80
Heacock PN, 203, 207, 208, 217, 224
Healy EC, 478
Hearst JE, 121, 124, 126, 131, 141, 157, 692, 693
Heath JK, 843, 855
Heath LS, 135, 138, 361
Hebron C, 157
Hecht L, 558, 559
Hecht MH, 574
Heck SD, 341, 342
Hedgpeth J, 182
Hedrick SM, 774, 776, 778
Heffron F, 458
Hegde R, 896
Hegg LA, 22
Hegler J, 426
Hehl R, 457
Hehman GL, 421
Heider JG, 615, 616, 618, 626
Heidler SH, 451
Heidmann T, 462, 463
Heidrich C, 339
Heikema A, 896
Heilek GM, 696, 700, 701, 703, 704
Heimburg T, 726, 743
Hein R, 740
Heins L, 904
Heinz DW, 480
Heisler LM, 157
Heitman J, 894, 896
Hekman C, 727
Helene C, 74
Helenius A, 629
Hell DE, 373
Heller M, 499
Hellinga HW, 565
Hellingwerf KJ, 218
Hellkamp J, 584
Hellmann W, 707
Helmreich E, 648, 671
Helms JB, 501
Hemmings BA, 481
Hemmingsen SM, 895
Hemperly JJ, 833, 835, 836
Hendlich M, 572
Hendrick GK, 601, 605
Hendrick JP, 213, 895
Hendrickson HS, 483
Hendrickson WA, 829, 831, 840, 847, 855, 856
Hendrix JC, 391, 399
Hendrix RW, 97, 895
Henikoff S, 451
Henkin TM, 139
Henley JR, 536
Hennecke S, 512, 513
Henninger H, 888
Henricksen LA, 62, 63, 65, 70, 72, 73, 75, 76, 80, 81, 83, 85, 86
Henry JP, 868, 884
Henry NL, 148, 156
Hensley P, 365, 367, 840, 842, 843
Hepler JR, 484, 485, 650, 651, 657, 669
Herbert CJ, 871
Herbert E, 808
Herd SM, 864
Hergersberg C, 899, 900
Herman RC, 375
Hermans PW, 457
Hermans-Borgmeyer I, 583
Hernandez N, 153
Hernandez TR, 354, 362, 365, 366, 370
Hernandez-Sotomayor SMT, 487–89
Hernandez-Verdun D, 322
Herrenknecht K, 829
Herrler M, 558
Herrmann C, 644, 646, 655
Herrmann JM, 894, 895, 897, 903
HERSCHLAG D, 19–59; 22, 23, 26–34, 36–38, 40, 41, 43–48, 52
Hersh D, 535
Herskovits JS, 534
Hertel KJ, 22, 23, 28, 36, 44
Herzmark P, 671
Herzog V, 885, 889, 892
Hescheler J, 671

Hess D, 151
Hess JF, 151
Hession C, 851
Heuer TS, 44
Heukeroth RO, 668
Heumann H, 160
Heus HA, 687
Heuser J, 514, 515, 517, 518, 533, 537
Heuser JE, 516, 538
Heusser S, 430
Heyer W-D, 62, 64, 67, 68, 77, 79–81
Heymann B, 788
Heythuysen HJ, 295
Hicke L, 543
Hickey DA, 191
Hickey R, 79
Hickey RJ, 79
Hickman AB, 441
Hickman SE, 386
Hicks KL, 126, 138
Hicks M, 22
Hicks S, 899
Hidaka H, 811
Hidaka M, 489
Hieter P, 328
Higashijima S-I, 478
Higashijima T, 486, 650, 651, 658, 671, 672
Higashitani A, 96
Higashitani N, 96
Higgins CF, 187, 189
Higgins JB, 665
Higgins NP, 439, 444, 452
Higley CA, 621
Higuchi H, 796
Higuchi K, 398
Higuchi R, 779
Hijazi KA, 710
Hikita C, 208, 214
Hilbers CW, 71
Hilbich C, 387
Hiles I, 490
Hiles ID, 542
Hilfiker RS, 891
Hilgenfeld R, 643, 647, 648, 656, 663
Hilger F, 870
Hilhorst E, 280
Hilkmann H, 500
Hill BL, 516, 517, 519
Hill CS, 321
Hill MG, 136, 144
Hill PL, 517, 537
Hill WE, 680, 696, 703, 704
Hille J, 443, 457
Hille R, 236, 249, 258
Hiller R, 558
Hille-Rehfeld A, 525, 539
Hillier L, 275
Hilton J, 234, 236, 237, 240, 242, 247–49, 253
Hilvert D, 32
Hilz MJ, 842
Himeno H, 685
Himoro M, 843
Hinds DA, 562, 569
Hine J, 33
Hinegardner RT, 759
Hines JC, 64, 67, 68, 83
Hines V, 877, 879
Hinshaw JE, 530, 534, 535
Hinton SM, 237
Hipskind RA, 130
Hiraga S, 145
Hirai H, 211
Hirano M, 180
Hiraoka S, 203, 208
Hirashima S, 149
Hirata M, 481
Hirochika H, 457
Hirose K, 803
Hirose S, 145
Hirota S, 289, 308
Hirota Y, 95
Hirotake OJ, 512, 516
Hirsch I, 351, 352
Hirsch M, 191
Hirschberg CB, 317, 318, 323
Hirsh D, 446
Hirst M, 582
Hisabori T, 722, 730
Hiscock DRR, 316
Hitomi T, 497
Hixson JE, 422
Hixson SS, 690, 704, 712
Hlavin ML, 836
Hlodan R, 537, 895
Ho C, 226
Ho Y-K, 631, 666
Hoch FL, 214
Hoch JA, 902
Hod Y, 583, 585, 599
Hodel A, 556, 562
Hodge JA, 429
Hodges PE, 895
Hodges RS, 883
Hodgkin DC, 270, 286, 307
Hodgson ALM, 491
Hodgson KO, 561
Hoeben P, 868
Hoeffler JP, 809
Hoehfeld J, 864, 894, 895, 901
Hoey T, 816
Hof P, 251, 257
Hoffarth V, 23, 705
Hoffman BM, 301
Hoffman DW, 687
Hoffman J-S, 364, 370
Hoffman MD, 596
Hoffman NG, 488
Hoffman PA, 851
Hoffman S, 833, 834, 836, 847
Hoffmann B, 215, 216
Hoflack B, 535, 538
Hofmann K-P, 648, 671
Hofmann MW, 213
Hofmann SL, 479, 657, 669
Hofrichter J, 389, 393, 399, 562
Hogan M, 317, 318, 321
Hogenkamp HPC, 280, 301
Hogeweg P, 136, 144
Hogg N, 851
Hohenester E, 270
Hohjoh H, 462
Hoj PB, 867, 873, 892, 893, 895
Hoke GD, 421
Hokin LE, 478
Hokin-Neaverson M, 499
Holbrook PG, 499
Holbrook SR, 27
Holland IB, 95
Holland JH, 564
Holland MJ, 151
Hollander G, 632
Hollaway MR, 307
Holloway DE, 275, 285, 299, 308
Holm L, 563–65, 568, 572, 827, 828
Holm RH, 246, 249, 257, 258, 262
Holmberg L, 704
Holme E, 424
Holmes CP, 780
Holmes KC, 643, 646
Holmes SE, 462, 463, 466
Holness CLL, 853
Holstein SE, 537
Holstein SEH, 537
Holt GD, 316–21, 323, 325, 327, 330
Holt IJ, 429
Holtz MS, 125, 143
Holzemann G, 391, 392
Holzenburg A, 726, 743
Homa FL, 352
Homma Y, 478, 488–90
Homsher E, 791, 795, 796
Honess RW, 355, 367, 368
Hong SCL, 365
Hong T-H, 429
Hong TJ, 457
Honig BH, 34, 553, 555
Honigberg SM, 491
Honing S, 533, 538
Honjo T, 767, 769
Honkanen L, 481, 483, 490
Hönlinger A, 877, 879, 880, 882
Hood L, 766
Hoogenraad NJ, 864, 866, 869, 873, 877, 878, 885, 892, 893, 895
Hoogerwerf WA, 489

Hoopes BC, 443
Hoover DM, 288, 290
Hopfield JJ, 684
Hopgood MF, 584
Hopkins CR, 536
Hopkins RS, 666
Hoppe J, 726, 740
Hopper AK, 871
Hoppert M, 275, 294, 725, 726
Horazdovsky B, 525, 536
Horecka J, 319
Horigome T, 319
Horiguchi T, 743, 744
Horii A, 463
Horikoshi M, 149
Horiuchi H, 538
Horiuchi K, 96
Horiuchi S, 617, 632
Horiuchi T, 209
Hörmann H, 843
Horn G, 644, 646, 655
Horowitz H, 130
Horowitz PM, 221, 867
Horst M, 873, 875, 878, 882, 885, 886, 888, 890, 891
Horstman DA, 480, 488
Horstmann H, 876, 877, 879, 882
Hortsch M, 838
Horvath S, 839
Horvitz HR, 531, 664
Horwich AL, 866, 895, 894, 901, 903, 905, 906
Hosey MM, 481
Hosobuchi M, 512, 513
Hosokawa M, 398
Hossle JP, 902
Hotchkiss RD, 338
Hotta Y, 490
Hottentrager S, 686
Hou C, 484, 720, 742
Hou DX, 818
Hounsell EF, 317, 324
Houseman ALP, 722
Houssay BA, 596
Houtchens K, 462
Houwen F, 295
Hovius R, 892
Howald-Stevenson I, 536
Howard BH, 819
Howard J, 802
Howe MM, 438, 443, 445, 454
Howell KE, 535
Howitt SM, 726
Howley PM, 348
Hoyer BH, 754
Hoyt DW, 866, 867
Hsu DS, 80
Hsu LM, 119, 133, 203
Hsu VW, 532
Hsuan J, 490
Hu C-Y, 722
Hu E, 587, 589, 590
Hu J, 421
Hübscher U, 62, 64, 76, 77, 79, 80, 85
Hua XX, 626, 631
Huang A, 687
Huang C, 492, 499, 851
Huang D, 388, 394, 395
HUANG E, 549–79
Huang ES, 572, 573
Huang GS, 558
Huang J, 96, 107, 108, 872
Huang L, 79
Huang M, 136, 144
Huang MM, 779
Huang R-Y, 69
Huang S-T, 11, 41, 273, 275, 278, 281–83, 286, 288, 291, 687
Hubank M, 770, 777
Hubbard JM, 692, 693
Hubbard RE, 242, 553
Hubbard SJ, 553, 555, 556
Hubbard T, 857
Huber AH, 834, 836, 838
Huber R, 234, 237, 242, 247, 249, 251, 253, 257, 566
Huber SA, 851
Hubert J, 316
Hubert M, 316
Hubscher U, 362, 366
Huckriede A, 896
Hudson A, 456
Hudspeth AJ, 802
Huennekens FM, 278, 281
Huff E, 202
Huff SY, 670
Hughes D, 684
Hughes JJ, 24
Hughson FM, 559, 560
Huh HY, 618, 619, 634
Huh N-h, 427
Hui DY, 614
Huisman O, 96, 106
Hulette CM, 394
Hull WE, 302
Hullihen J, 720
Hulmes JD, 726
Huls PG, 95
Humayun I, 801
Hume DA, 136, 146
Hummler E, 606
Humphries MJ, 848
Humphries S, 759
Hung SC, 124, 142
Hunig T, 853
Hunt AG, 192, 193
Hunt NG, 554
Hunt T, 190
Hunt TW, 664
Hunter LA, 871
Hunter T, 316, 814
Hurlburt WW, 364, 367, 369
Hurle MR, 386, 387, 390, 393, 398
Hurley JB, 658, 665, 666
Hurley JH, 479, 482, 556, 562
Hurst PF, 372
Hurt EC, 866
Hurwitz J, 62, 63, 65–68, 75, 77–79, 81–86, 175, 183
Husain A, 490
Hussain K, 106
Hutcheon ML, 741, 797
Hüttenhofer A, 697, 699, 700, 704, 710
Huttner W, 535
Hwang CBC, 365, 368
Hwang DS, 209
Hwang H-Y, 291
Hwang J-J, 593
Hwang JK, 564, 565
Hwang S, 876
Hwang SC, 489
Hwang ST, 876, 885, 888, 889, 891, 894
Hwang Y-W, 654, 655
Hyatt MR, 7
Hyde DR, 490
Hyde GE, 256
Hyman BT, 395
Hyndman DJ, 730
Hynes RO, 843, 847, 848
Hyvönen M, 481

I

Ibrahim WA, 457
Ichiyama A, 873
Idowu AD, 375
Igarashi K, 350, 354
Iggo R, 317, 323
Ihara Y, 387, 396
Iida N, 256
Iiri T, 671
Ikeda E, 885, 887, 894, 895
Ikeda K, 534
Ikeda T, 340
Ikeda TM, 414
Ikegami K, 211
Ikenaga K, 462
Ikura M, 829, 831, 832
Iliopoulos O, 147
Illangasekare M, 24
Illangesekare M, 32
Illing N, 110
Ilsley D, 369
Im M-J, 490
Imai E, 590, 591, 594
Imai M, 180
Imamoto N, 873
Imbalzano AN, 130, 140, 153, 154
Impey S, 811

Improta G, 339
In Y, 343
Inaba M, 317, 323, 325
Inaka K, 720
Indyk V, 731
Inestrosa NC, 392, 397
Ingemarson R, 375
Ingham KC, 845
Ingle CA, 187, 188, 190
Ingles CJ, 62, 73, 75, 76, 80
Inglese J, 481, 482
Inglesias JL, 847
Ingram VM, 325
Iñiguez-Lluhi JA, 485, 665, 666, 669
Innis JW, 146, 148
Inokuchi H, 685
Inoue A, 342
Inoue H, 490
Inoue T, 29
Inouye H, 842
Inouye M, 177, 213, 220
Insdorf NF, 420, 421
Insel PA, 495
Iofin M, 553, 555
Iost I, 189
Ip NY, 316
Ip T, 601
Ip YT, 601, 602
Iqball M, 556
Irby RB, 237
Irie A, 848, 852
Irvine KD, 29
Isaksson LA, 691
Isaya G, 895
Ishiai M, 62, 67, 68, 78, 83, 84
Ishibashi M, 316, 326
Ishida N, 500
Ishiguro K, 316
Ishihara Y, 738
Ishii N, 720
Ishijima A, 791
Ishikawa D, 219
Ishikawa H, 462
Ishikawa K, 556, 562
Ishikawa Y, 211, 463
Ishimi Y, 63, 77, 79
Ishiwata S, 787, 795
Iskander AS, 280
Isobe T, 875
Issartel JP, 732
Itaya M, 184
Ito A, 870, 892, 895
Ito J, 421
Ito N, 687
Ito S, 218
Ito T, 149
Ito Y, 722, 723
Itoh H, 648, 657
Itoh K, 779
Itoh T, 416
Ivanov IE, 535
Iwahashi J, 873, 875, 884
Iwai A, 396
Iwamoto A, 738
Iwamoto-Kihara A, 724, 726, 739
Iwanaga S, 873, 875
Iwasaki Y, 491
Iwashita T, 340, 341, 343
Iwatsubo T, 387, 396
Iyengar R, 478
Iynedjian PB, 584, 585, 593
Izban MG, 120, 121, 125, 128–30, 132, 162
Izuta S, 77, 211

J

Jaacquet E, 662
Jablonski PE, 294
Jabs EW, 63, 64, 67, 68, 79, 84
Jack R, 339
Jackle H, 146
Jackowski S, 203, 204, 225
Jackson AP, 514, 518, 537
Jackson AU, 146, 148
Jackson B, 617, 623
Jackson CA, 275
Jackson JB, 241
Jackson KW, 147
Jackson MB, 225
Jackson RJ, 190
Jackson SE, 558, 574
Jackson SP, 85, 112, 317, 321, 456
Jackwood DH, 364
Jacob F, 95, 625
Jacob RJ, 350, 351
Jacob SM, 530
Jacob ST, 191
Jacob-Mosier GG, 672
Jacobs JR, 838
Jacobson A, 190
Jacobson JG, 374
Jacobson K, 787
Jacques JP, 134, 135, 143, 144
Jacquier A, 46, 47
Jaeger JA, 24, 36
Jaeger L, 44
Jaehning JA, 414
Jaenisch R, 447
Jaffe A, 106
Jaffe H, 796
Jaffe RC, 808
Jahn R, 482
Jain D, 585
Jain MK, 483
Jain P, 144
Jakes R, 325
Jakobs KH, 484, 490, 495
Jakubczak JL, 461–63
James DW, 457
James P, 895
James SR, 483
Jameson JL, 808, 809
James-Pederson M, 136
Jamil H, 226
Jancarik J, 643
Janciauskiene S, 391, 397
Jang S-H, 414
Janin J, 552, 554, 563, 833, 842, 858
Janke A, 423
Janknecht R, 655, 818
Jansch L, 892
Jansen R, 275
Jansonius JN, 555
Jarosch E, 887
Jarrett JT, 276, 278, 283, 288, 290, 389–91, 393–97, 399, 401
Jarrett T, 519, 520
Jarvest RL, 358
Jarvis JA, 867
Jascur T, 876, 891
Jasman RL, 851
Jaspers S, 812
Jault FM, 730
Jault J-M, 722, 725, 730–33
Jaussi R, 864
Jeanteur-De Beukelaer C, 724, 739
Jeffreys AJ, 764
Jeggo PA, 85
Jelene P, 771
Jencks DA, 13
JENCKS WP, 1–18; 5–8, 11–14, 17, 19, 22, 31, 33–35, 39, 40, 280, 802
Jenco JM, 492, 494, 495, 497
Jeng MF, 559, 561
Jenison RD, 32
Jenkins FJ, 349
Jenkins TM, 441, 731
Jennings JM, 392, 398
Jennings PA, 560, 561
Jennings PR, 871
Jennity J, 213, 220
Jeno P, 885–88, 894, 895, 905
Jensen KF, 120
Jensen M, 387
Jensen PH, 834, 835
Jensen RE, 864, 866, 877, 884, 885, 887, 905
Jensen S, 462
Jeon CJ, 131, 149
Jeong SW, 134, 135
Jeong-Yu S, 416, 417
Jernigan RL, 572
Jessberger R, 77
Jessell TM, 774, 776, 777
Jessen TH, 687
Jeter JR Jr, 500
Jetton MR, 7

Jhon D-Y, 478, 480, 484–86, 489, 664
Jhoti H, 644, 646, 647, 653
Ji H, 450, 451
Jiang F, 24
Jiang HP, 484–86, 498
Jiang M-J, 480
Jiang M-S, 316, 321, 323
Jiang R-T, 499
Jiang X, 496, 497
Jianzhong S, 219
Jie L, 552
Jigami Y, 317, 321
Jimenez EC, 341
Jin AJ, 533
Jin DJ, 142, 157
Jin YS, 531
Jindal S, 895
Jing S, 539
Jingami H, 616
Jinnai H, 497
Joachimiak A, 555, 896
Joazeiro CAP, 119
Job C, 121, 131, 134, 141
Job D, 121, 131, 134, 141
Joblin KN, 307
Jockusch BM, 533, 538
Jofre JT, 368
Johansson J, 386
Johansson LB-Å, 223
John J, 643, 646, 650, 651, 654, 655, 662, 663
Johnson AW, 307
Johnson BC, 296
Johnson D, 701, 776
Johnson EA, 439, 452
Johnson GL, 650, 659
Johnson GVW, 317, 325
Johnson JL, 236, 237, 255
Johnson KA, 22, 37, 38, 48
Johnson MD, 181, 182, 192
Johnson MK, 235–37, 240, 259, 263, 265
Johnson MS, 666
Johnson NJE, 664
Johnson PA, 355, 364
Johnson PF, 809
Johnson RM, 489
Johnson TL, 121, 132, 161
Johnson WJ, 617, 624, 627, 631, 633
Johnson-Schlitz DM, 442, 456
Johnsson K, 53
Johnston E, 741
Johnston NC, 224
Johnston NL, 275, 281
Johnston SA, 428
Jolicoeur C, 556
Joly FC, 213
Joly M, 525, 542
Jones DH, 584
Jones DT, 568
Jones EV, 149
JONES EY, 823–62; 825, 843, 851, 852, 854–57
Jones FS, 847
Jones GA, 483, 487, 488, 500
Jones JD, 457
Jones KA, 136, 143, 152
Jones PC, 355, 726, 743
Jones RA, 24
Jones S, 853
Jones SM, 535, 554
Jones TA, 553, 564
Jongeneel CV, 350, 351
Jordan E, 130
Jordi W, 900
Jorgensen BB, 726
Jorgensen EM, 531
Joseph S, 696, 703
Joshi P, 847
Joshi S, 728
Jouet M, 836, 838, 839
Jounouchi M, 724
Journot L, 667
Joyce CM, 365
Joyce GF, 20, 24, 29, 49, 51, 52
Joyce PB, 871
Joziasse DH, 328
Ju Q, 130, 131, 150
Judwig DL, 75, 76
Jueptner O, 226
Juin P, 868, 884
Julin CM, 32
June CH, 136
Jung G, 339
Jung H, 220
Jung K, 220
Junge W, 728, 737, 742, 796, 799, 802
Jungermann K, 584
Jungnickel B, 872
Junke N, 697, 699, 701
Junne T, 877, 878, 880–83, 894, 895
Junop MS, 446
Jurnak F, 641, 643, 647, 648, 655
Juza A, 275, 294
Juzumiene D, 699
Juzumiene DI, 699, 700

K

Kaback HR, 219, 220
Kaberdin VR, 189
Kabsch W, 643–46, 653, 656, 660
Kadesch TR, 121, 124
Kadner RJ, 203, 225
Kadonaga JT, 78
Kadota K, 513
Kaduce TL, 616, 617
Kaelin WG Jr, 147
Kaerner HC, 353
Kaestner KH, 606
Kaetzel MA, 482
Kagan-Zur V, 453
Kagawa Y, 720, 722, 723
Kagramanova VK, 707
Kaguni LS, 420, 421
Kahan L, 699
Kahn BB, 595
Kahn DH, 646, 647, 653
Kahn JD, 121
Kahn PC, 559, 561
Kahn RA, 211, 491, 494, 498, 499, 646, 662
Kaibara C, 722, 730, 739
Kaibuchi K, 482
Kaim G, 736
Kainz M, 122, 128
Kaiser AD, 97
Kaiser CA, 513
Kaiser K, 455, 466
Kaiser S, 585, 593
Kajava AV, 214
Kakudo M, 559
Kal AJ, 86
Kalapos MP, 179, 183, 185, 189
Kalbitzer HR, 650, 651, 659, 660
Kallarakal AT, 342
Kallen KJ, 632
Kallen RG, 280
Kalman VK, 665
Kalmar GB, 206
Kalousek F, 275, 866, 892–96
Kalovic PA, 583
Kalpana GV, 450
Kaltenbach RF III, 480
Kamakaka RT, 78
Kamali-Rousta M, 350
Kamata T, 848, 852
Kamatani Y, 340, 341, 343
Kameyama K, 484, 486
Kanaho Y, 495
Kanai A, 149
Kanaseki T, 513
Kanaya S, 556, 562
Kanazawa H, 738
Kandel ER, 833
Kandler O, 112
Kandpal RP, 741
KANE CM, 117–72; 119–25, 128, 129, 132, 136, 138, 146, 148, 149, 156, 157, 161, 163
Kaneko KJ, 29
Kaneko T, 185, 275, 463
Kanematsu T, 481
Kanfer JN, 491, 492, 499
Kanfer K, 201
Kang H-S, 498
Kang JJ, 151
Kang PJ, 885, 887, 888, 894

Kang VH, 664
Kanoh H, 500
Kansil S, 709
Kaplan AS, 376
Kaplan JH, 316
Kaplan MR, 632
Kaplan S, 205
Kapp OH, 574
Kaptein R, 900
Kaput J, 902
Kar L, 843
Karecla PI, 832
Karim AM, 684
Karimi R, 684, 685
Karimova GA, 491
Karin M, 814
Karjalainen K, 825
Karl IE, 599
Karls U, 447
Karlstrom AR, 386
Karnik P, 176, 181, 185
Karpel RL, 24, 78
Karpen GH, 451, 456, 467
Karplus M, 551, 563–65
Karpusas M, 851, 852
Karr D, 809
Karslake C, 867
Kartenbeck J, 515
Karwan R, 417
Kash SF, 136, 146, 148
Kashlev M, 122, 127, 128, 143, 157, 159, 160, 163
Kasho VN, 729, 731
Kasper S, 808
Kasravi B, 462
Kassavetis GA, 119, 121, 123–26, 130, 132, 148, 155, 157, 163
Kassenbrock CK, 877, 879, 882
Kassis JA, 456
Kastner B, 712
Katada T, 495, 671
Katan M, 479, 480–82
Katan SU, 480
Kataoka K, 386, 390, 393
Kataoka M, 559, 560
Katayose Y, 208
Kates M, 112
Kato H, 143, 477
Kato K, 854
Kato M, 484, 486
Kato T, 767, 769, 774
Kato Y, 730, 731, 885, 887, 894, 895
Katz A, 481, 484–86, 652, 665, 667
Katz E, 338, 342
Katz J, 706, 707
Katz RA, 448, 467
Katzav T, 393
Käufer N, 175
Kauffman MG, 66
Kaufman AE, 426
Kaufman ER, 368
Kaufman PD, 78, 442, 456
Kauzmann W, 550, 556, 571
Kawabata S, 873, 875
Kawagishi I, 743, 796
Kawakami T, 481
Kawakami Y, 342, 481
Kawakita M, 651
Kawasaki H, 478, 479
Kawashima T, 672
Kay BK, 488
Kay CJ, 237
Kay MS, 560
Kay RJ, 206
Kayalar C, 721, 737
Kazantsev A, 80
Kazazian HH, 456, 462, 463, 466
Kazazian HH Jr, 462, 463
Kaziro Y, 648, 651, 652
Kazlauskas A, 488, 489, 525, 542
Ke H, 41
Ke N, 451, 462
Keana JF, 741
Kearse KP, 316, 317, 324
Kee BL, 819
Keen JH, 317, 325, 513, 515, 516, 519–21, 523, 525, 526, 538, 541
Keen JN, 478, 485
Keene JD, 151
Keene RG, 128, 129
Keep NH, 271, 273, 275, 296, 298–300, 302, 304
Kehrl JH, 487, 664
Keil P, 877, 878, 880, 879, 884, 885, 887, 898
Keiler KC, 685
Keir HM, 364, 365, 372
Kelbaugh PR, 341, 342
Kell DB, 725
Kellems RE, 136, 146, 148
Keller F, 833
Keller J, 457, 495
Keller RC, 214, 341
Keller U, 338, 343
Keller W, 185, 270, 308
Kellermann J, 185
Kelley JM, 778
Kelley R, 456
Kelley-Gerraghty DC, 812
Kelly JW, 386
Kelly LA, 616
Kelly MB, 226
Kelly T, 62, 63, 65, 66, 68, 78, 81
Kelly TJ, 62–64, 66–68, 73, 74, 76–81, 84, 85
Kelly WG, 155, 316–19, 321, 322
Keltjens JT, 288
Kemler R, 829
Kemmink J, 558
Kemp SD, 368
Kempner ES, 619
Kenan DJ, 151
Kennedy BP, 211
Kennedy EP, 201, 204, 208, 216
Kennedy NJ, 618, 629
Kennell JC, 464
Kenny MK, 62, 63, 65, 66, 68, 73, 77–79, 81, 82, 84
Kenny PTM, 340, 341, 343, 391, 396
Kent C, 201, 205, 206
Kent NE, 458
Kenwrick S, 836, 838, 839
Kenyon GL, 619
Kephart DD, 124, 129, 147
Kerker BJ, 29
Kerkhofs P, 814
Kermicle JL, 457, 467
Kerppola TK, 124, 128, 129, 163, 321
Kerr ID, 491, 498
Kervran A, 599, 600
Kesav S, 633
Keshav KF, 64, 65, 67, 68, 72, 75, 76, 79, 81
Kessler E, 350, 351
Kessler M, 129, 140
Kessler SP, 606, 622
Kettmann R, 814
Keyte J, 764
Khan A, 223
KHAN S, 785–805; 796, 798–803
Kharakoz DP, 556
Khattar M, 95, 103
Khoo UY, 424
Khorana HG, 667
Khorasanizadeh S, 558
Khosla M, 22, 37, 38, 46
Khurana S, 489
Kibel A, 147
Kidera A, 565–68
Kiebler M, 864, 876–78, 880–82, 898
Kiefer LL, 30
Kieffer B, 853, 856
Kiefhaber T, 557, 558, 560, 561
Kieft K, 616, 618, 619, 622
Kierzek R, 22, 36–38, 41, 48
Kietzmann T, 584
Kihara H, 723
Kikuchi A, 429
Kiley PJ, 205
Killeen M, 148
Killeen N, 855
Killian JA, 214, 217, 224, 900
Killian JM, 842
Killington RA, 372
Kilpatrick L, 237
Kilshaw PJ, 832
Kim CG, 478, 485, 486

Kim CS, 62, 65, 68, 69, 73
Kim CW, 193
Kim DK, 65, 72, 75, 76, 78, 79, 81, 83
Kim DM, 485
Kim H, 213, 220, 485, 487
Kim HK, 487
Kim J, 211, 427
Kim JG, 487
Kim JH, 489
Kim JM, 451, 462
Kim JW, 480, 487
Kim KJ, 853
Kim KS, 900
Kim PS, 557, 559, 565, 567
Kim S-H, 24, 27, 41, 643, 645, 653
Kim U-H, 487
Kim Y, 79
Kim YJ, 212, 213
Kimura H, 340
Kindle KL, 192
King IA, 317, 324
King J, 389
King MP, 428
King RM, 775, 776, 778
King TC, 418, 421
Kingston R, 120
Kingston RE, 130, 137, 140, 153, 154, 809
Kinnunen PKJ, 215
Kinnunen PM, 617–19
Kinoshita K, 879, 883
Kinosita K Jr, 742, 787, 795
Kinsey JA, 462
Kinzler KW, 778, 779
Kioussis D, 584
Kipke CA, 257, 258
Kipnis DM, 599
Kirby AJ, 40
Kirchgessner CU, 80, 85
Kirchhausen T, 514–22, 524, 532, 533
Kirchner J, 450, 451
Kirillov SV, 690, 697, 712
Kirk M, 324, 331
Kirkness EF, 185, 275
Kironde FAS, 743
Kirov N, 130
Kirschner DA, 392, 394, 395, 397, 398, 842
Kirschner M, 99
Kiselyov VV, 834, 835
KISKER C, 233–67; 234, 236, 237, 240, 242, 247–49, 253
Kispal G, 876, 891, 900, 901
Kiss I, 455, 456, 466, 467
Kiss T, 417
Kiss Z, 496, 499
Kisselev OG, 671
Kisselev P, 226
Kister A, 856
Kisters-Woike B, 387
Kita K, 319
Kitabatake M, 685
Kitada S, 895
Kitajima S, 147
Kitamura Y, 439, 447
Kito M, 225
Kito Y, 485
Kitoh Y, 463
Kitzmiller JL, 599
Kjeldgaard M, 640, 641, 643, 645, 647, 648, 653, 655, 656, 663, 683, 691
Klaff P, 182, 192, 193
Klamo E, 811
Klansek JJ, 627, 631
Klar A, 774, 776, 777
Klauer JS, 354
Klaus C, 885, 891–93
Klaus W, 539
Klausner RD, 501
Klebe C, 644, 646, 653
Kleckner N, 440, 442, 443, 445, 446, 448, 449, 452, 454, 455, 458, 460, 465, 466
Kleene R, 899
Kleiber J, 895
Klein RD, 583
Klein WH, 759
Kleinkauf H, 338
Kleinschmidt AM, 79
Klemenz R, 326
Klemm DJ, 587, 590, 591, 597, 598
Klena JD, 217
Kletzin A, 234, 237
Kleuss C, 650, 657, 660, 669, 671
Kleywegt GJ, 553
Klinedinst DK, 363
Klingenberg M, 214–16
Klionsky DJ, 799
Klopf FH, 618
Klug A, 24
Klunk WE, 386
Knäblein J, 234, 237, 242, 247, 249, 253
Knauer M, 387, 390, 391, 404
Knipe DM, 348, 355, 361, 362, 365, 371, 372
Knippers R, 70, 71, 76, 77
Knitt DS, 22, 27, 29, 30, 37, 46
Knopf CW, 366, 368, 371
Knopf J, 478, 484, 485
Knopf KW, 364, 368
Knorpp C, 872, 895
Knowles B, 776
Knowles JR, 22, 23, 30, 47, 342
Knudsen J, 558
Knutzon DS, 461
Kobayashi H, 147
Kobayashi K, 279, 622
Kobayashi M, 418, 491, 492, 499
Kobayashi T, 75, 76, 80
Koblan KS, 488
Koblika BK, 542
Koch BD, 873
Koch SR, 593, 594
Koch WJ, 542
Kocher JPA, 569
Kocher TD, 423
Kochoyan M, 24
Kocisko DA, 397, 400–2, 404
Koeberl DD, 274
Koehl P, 551, 564, 565, 567, 568
Koelle MR, 664
Koenig JH, 534
Koester JP, 317, 327
Koetzle TF, 642
Koff A, 357–59
Kogan S, 900
Kogoma T, 209, 210
Kohlbrenner WE, 728, 740
Kohler H, 871, 896, 900
Kohlwein SD, 499, 864
Kohne DE, 754, 771
Kohno T, 478
Koidl S, 894, 896
Koike K, 418
Koike T, 741
Kojima H, 791
Kojima K, 211
Kolakofsky D, 134, 135, 143, 144
Kolb A, 139
Kolenbrander HM, 582
Kolinski A, 569
Koll H, 889, 901, 903, 905
Kollman PA, 563, 568, 572
Kolmerer B, 857
Kolodner RD, 62, 64, 65, 67, 68, 77, 79–81, 427
Kolodny EH, 842
Kolomiets AP, 558
Kolter R, 126
Komari T, 491
Komatsu-Takaki M, 740
Komine Y, 685
Komiya T, 865, 873, 875
Kong XP, 366
Konieczny A, 457
Konig A, 302
Konigsberg WH, 83
Konings DA, 136, 144
Konings RNH, 71
Konings WN, 218
Konishi H, 481
Konrat R, 270, 286, 307
Kool J, 97
Koonin EV, 356, 363, 498
Koontz D, 426
Koorengevel MC, 218, 220, 221, 224, 225
Koppel DE, 110

Koppel R, 393
Koppenol WH, 22
Koppes L, 209
Kopylova A, 699
Korenberg J, 291
Korenfeld C, 902
Korman MH, 462, 463
Kornberg A, 62, 77, 209, 370, 373, 374, 420
Kornberg RD, 121, 130, 148, 156, 190
Kornberg TB, 456
Kornfeld S, 522, 523, 532, 535
Korsmeyer SJ, 870, 899
Kos W, 86
Kosciuk M, 427
Kosen PA, 539
Koshizawa J, 632
Koshland DE Jr, 625
Koshland ME, 778
Koshy TI, 900
Kosic-Smithers J, 885, 887, 894
Kosik KS, 386, 387, 396
Kosmoski J, 387, 390, 391, 398
Kosovsky MJ, 355
Kostka G, 488
Kosz-Vnenchak M, 374
Kotani H, 275
Kouzarides T, 323, 818
Kovach N, 848, 852
Kowalczykowski SC, 62, 68, 69, 71, 77, 440
Kowalski D, 69
Kowenz-Leutz E, 815, 819
Koyanagi M, 854
Kozarich JW, 342
Kozasa T, 484, 648, 651, 664, 668
Kozlov IA, 730
Kozma R, 500
Kraal B, 662
Kraayenhof R, 740
Kraemer D, 320
Kraemer R, 633
Kragelund BB, 558
Krainer E, 885, 887, 888, 894
Kramer J, 885, 887, 894
Kramer RA, 181
Kranz DM, 776, 777
Krapcho KJ, 341–43
Krapivinsky GB, 666
Krasel C, 542
Krasheninnikov IA, 864
Krasnewich DM, 317, 325
Kratky C, 270, 283, 308
Kraulis PJ, 243, 284, 642, 646, 652, 655, 831
Krause A, 457
Krause BR, 616, 617
Krauskopf A, 136, 144
Krauss F, 259
Kräutler B, 270, 274, 283, 286, 292, 294, 307, 308
Krebs CM, 463
Krebs EG, 331, 815
Krebs HA, 593
Krebs JF, 30
Kreevoy MM, 33
KREIL G, 337–45; 339–41
Kreimer G, 533, 538
Kreis TE, 512, 513, 529, 535
Kreissman SG, 767, 769
Krek W, 322
Kremer JD, 275
Krengel U, 643, 645, 646, 652, 655, 660
Krenn BE, 740
Kreppel LK, 316, 318, 327, 330, 331
Kress C, 606
Kretschmer PJ, 452
Kretsinger RH, 479
Kreydiyyeh S, 489
Krieg J, 818
Krieg M, 139
Krieg UC, 885, 888, 894
Krieglstein K, 606
Krisch HM, 188, 189
Krishna P, 211
Krishnamachari N, 24
Kriz RW, 478, 482, 484, 485
Krohn M, 131, 137
Krohne G, 320
Krokan HE, 373
Kroll F, 291, 296, 302
Kroll FK, 302
Kronidou NG, 885, 886, 894
Krook M, 278
Kroth-Pancic PG, 743
Kru W, 291
Kruft V, 892
Kruger K, 20, 22
Kruger S, 139
Krulwich A, 725
Krumm A, 119, 136, 146, 148, 151, 274
Krummel B, 120, 125–28, 157, 159, 162
Krupnick JG, 542
Kruse M, 828
Kruth HS, 629
Krzycki JA, 275, 295
Krzyzosiak W, 707
Ktistakis NT, 501
Ku N-O, 317, 321, 324, 326
Kuan Y-S, 483
Kuang YN, 485, 486
Kubelik AR, 414
Kubelka M, 793
Kubler E, 536
Kubo KM, 439, 442, 449, 453, 459, 460
Kubo T, 149
Kubo Y, 255
Kubota I, 340, 341, 343
Kubota T, 211
Kübrich M, 864, 877, 880, 882, 885, 887, 888, 894
Kuchta R, 369
Kuchta RD, 370
Kudla J, 192
Kudlow JE, 329, 330
Kuechler E, 701
Kuehl WM, 136, 774
Kuettel MR, 812
Kuge O, 206, 207
Kuhn A, 213, 903
Kuhn LA, 539, 540, 684
Kuiper MA, 387, 392
Kuki M, 724
Kull FJ, 795
Kumamoto T, 895
Kumar A, 457
Kumar KP, 119, 153
Kumar M, 112, 292
Kumar RA, 24
Kumashiro T, 491
Kumazawa Y, 423
Kumura K, 365
Kundrot CE, 24
Kung H-F, 275, 296, 480
Kunitake G, 614
Kunkel LM, 770, 771, 777
Kunkel TA, 77, 420
Künkele KP, 880, 898
Kunsch C, 485, 665
Kuntz ID, 539, 554, 556, 650
Kuntz ID Jr, 553
Kunz J, 896
Kunz M, 296, 300
Kunze R, 457
Kuo AA, 365
Kuo J, 443
Kuo SC, 787, 788
Kuo Y-M, 399
Kuraoka I, 75, 76, 80
Kuras R, 44
Kuribara H, 495, 497
Kurihara FN, 241
Kurihara KL, 536
Kurimasa A, 80, 85
Kuriyan J, 366
Kurkulos J, 456
Kurland CG, 684
Kuroda S, 481
Kuroiwa T, 425
Kuroki T, 427
Kurosawa SE, 795
Kuruc N, 324
Kurz JC, 29
Kurzchalia TV, 633
Kushner DJ, 112
Kubo T, 149
Kubo Y, 255
Kubota I, 340, 341, 343
Kubota T, 211
Kübrich M, 864, 877, 880, 882, 885, 887, 888, 894
Kuchta R, 369
Kuchta RD, 370
Kudla J, 192
Kudlow JE, 329, 330
Kuechler E, 701
Kuehl WM, 136, 774
Kuettel MR, 812
Kuge O, 206, 207
Kuhn A, 213, 903
Kuhn LA, 539, 540, 684
Kuiper MA, 387, 392
Kuki M, 724
Kull FJ, 795
Kumamoto T, 895
Kumar A, 457
Kumar KP, 119, 153
Kumar M, 112, 292
Kumar RA, 24
Kumashiro T, 491
Kumazawa Y, 423
Kumura K, 365
Kundrot CE, 24
Kung H-F, 275, 296, 480
Kunitake G, 614
Kunkel LM, 770, 771, 777
Kunkel TA, 77, 420
Künkele KP, 880, 898
Kunsch C, 485, 665
Kuntz ID, 539, 554, 556, 650
Kuntz ID Jr, 553
Kunz J, 896
Kunz M, 296, 300
Kunze R, 457
Kuo AA, 365
Kuo J, 443
Kuo SC, 787, 788
Kuo Y-M, 399
Kuraoka I, 75, 76, 80
Kuras R, 44
Kuribara H, 495, 497
Kurihara FN, 241
Kurihara KL, 536
Kurimasa A, 80, 85
Kuriyan J, 366
Kurkulos J, 456
Kurland CG, 684
Kuroda S, 481
Kuroiwa T, 425
Kuroki T, 427
Kurosawa SE, 795
Kuruc N, 324
Kurz JC, 29
Kurzchalia TV, 633
Kushner DJ, 112

Kushner SR, 177, 182–84, 187, 188, 190
Kushner ZR, 187, 188
Kusters R, 213, 214
Kuszewski J, 558
Kutay U, 872
Kutter E, 143
Kuwada N, 341
Kuwajima K, 550, 558, 559, 561
Kuwano M, 188
Kuwano S, 425
Kuze K, 767, 769
Kuzuhara T, 149
Kvilekval KV, 634
Kwak J-Y, 495, 497
Kwan C, 179, 180, 191
Kwok RPS, 814, 817, 819
Kwon D, 440, 442, 445, 446, 449, 454, 455, 458, 460
Kwon M, 387, 390, 391
Kwong AD, 77
Kwong PD, 829–33, 856
Kwong PL, 900
Kycia JH, 687
Kyle DJ, 567

L

Laaksonen M, 766, 768
Labahn A, 734, 737
L'Abbé D, 419
Labbé J-C, 534
Labeit S, 857
Labhardt AM, 558
Labo M, 185
Lachance A, 206
Lackner KJ, 618
Lackner P, 572
La Cour TFM, 641, 643
Lacroute F, 138, 149
Ladner JE, 24
Ladner R, 427
Ladror US, 390, 391, 396, 398, 399, 402, 404
Laemmli UK, 62, 64, 66, 68, 74
Lafer EM, 526
Lagaye S, 317
Lagendijk EL, 873, 875
Lagercrantz J, 478
Laggerbauer B, 44
Lagina AT III, 421
Lahaye A, 421
Lai C, 840
Lai C-S, 843
Laine RA, 218
Laipis PJ, 418, 419, 422
Laird CD, 754
Lake JA, 688, 689, 699
Lalli E, 813
Lalor TM, 461
Laloraya S, 885, 887, 888, 894, 895
Lamar EE, 770, 771, 777, 779
Lamaze C, 529, 535, 541, 542
Lamb JR, 328
Lamb N, 817
Lambeth JD, 493, 495–97
Lambowitz AM, 22, 29, 440, 463–65, 467, 899
Lambright DG, 643, 657, 660, 661, 666, 667, 669, 672
Lamers WH, 585, 593, 601, 605
Lammers R, 488
LaMorte V, 817, 818
Lamping E, 877, 878, 882
Lamy MT, 258
Land H, 323
Landau EM, 478
Landers JP, 143
Landick R, 119–24, 126–29, 137, 157, 159–63, 180
Landis CA, 650, 659, 661
Landis RC, 851
Landro JA, 342
Landschulz WH, 809
Landsman D, 414
Landwehr R, 833
Lane DP, 62, 79, 372, 754
Lane MD, 605
Lane WS, 62, 73, 86, 87, 147
Lang BF, 419, 423, 464
Lang D, 814
Lang WH, 130, 134, 135, 150
Lange G, 856
Lange LG, 617–19
Lange Y, 617, 624, 626, 627, 630, 632, 633
Langen R, 660, 661
Langer D, 149
Langer JA, 691
Langer PR, 766
Langer T, 537, 864, 887, 888, 890, 894–97
Langley D, 175
Lankinen H, 375
LaNoue KF, 735, 738
LANSBURY PT JR, 385–407; 40, 386–91, 393–97, 399–402, 404
Lansing TJ, 489
Lanyi J, 802
LaPointe JW, 130
Lappert MF, 307
Larder BA, 368
Lardy HA, 731
Largis EE, 621
LaRiviere FJ, 22
Lark KG, 209
Larkin S, 136, 146
Larsen C-J, 317
Larsen N, 692
Larson RS, 848
Larsson N-G, 424, 426, 430
Lascu I, 901
Laskey RA, 66, 85
Laskowski MJ, 43
Lassar AB, 769, 776
Lasters I, 564, 565, 567
Laterveer FD, 868
Latham JA, 44
Lathrop EJP, 569
Lathrop JT, 901
Läthy R, 568, 572
Latif F, 147
Latt SA, 770, 771, 777
Lau R, 795
Lau YF, 770, 771, 774
Lauder SD, 440
Laue ED, 646, 652, 655
Lauffenburger DA, 787, 788
Laughton CA, 564–66
Lauhon CT, 32
Laupe HF, 353
Lauquin GJ, 884
Laurance ME, 814, 817, 819
Laurenson P, 451
Lauterburg BH, 426
Lautwein A, 652, 656, 660, 663
Lavallee P, 375
Laverty T, 455, 456, 466, 467
Lavery R, 563–65
Lavi S, 63, 69
Lavoie BD, 442–44, 448, 459, 460
Lavrik I, 699
Law RH, 895, 904
Lawlor K, 79
Lawrence MB, 858
Lawson CL, 555
Lawton L, 771
Lawton RG, 672
Laybourn PJ, 321, 322
Lazarevic MB, 671
Lazarus LH, 339, 341
Lazdunski A, 222
Lazdunski C, 222, 905
Lazowska J, 464
Le NP, 730
Leach AR, 565
Leadlay PF, 271, 273, 275, 285, 296–302, 304
Leahy DJ, 847, 848, 852
Lear SR, 616, 619
Leary JJ, 766
Leaver CJ, 869, 895
Lebeau MC, 766, 768
LeBeau MM, 596
Lebedev IO, 558
Lebedeva MI, 825
Leberer E, 669
Leberman R, 672
Le Borgne R, 535
LeBosuf RC, 395

Lebowitz MS, 720
Le Caer JP, 341, 343, 421
Lecellier G, 464
Lechner PS, 586, 590
Leclerc D, 291
LeClerc GM, 295
Leclercq L, 462, 463
Lecomte M-C, 498
Ledbetter DH, 770, 771, 779
Ledbetter SA, 770, 771, 779
Ledley FD, 275, 285, 298
LeDoux SP, 426, 427
Ledwith BJ, 421
Lee B, 552, 564
Lee C, 563, 564, 567, 568
Lee C-H, 458, 484, 667
Lee CK, 361
Lee C-W, 478, 484, 485
Lee DN, 120, 122, 123, 127, 128, 157, 159–63
Lee DY, 416, 417, 420
Lee E, 485, 643, 649–51, 655, 657, 658, 660, 662, 665, 666, 669
Lee F-JS, 494
Lee G, 136
Lee H-H, 484, 485
Lee JC, 556, 787
Lee JL, 193, 500
Lee JM, 155, 156
Lee JO, 848
Lee JP, 395
Lee K-H, 478, 484, 485
Lee KJ, 355
Lee M, 317, 325, 387
Lee MS, 458
Lee RSF, 732, 738
Lee SB, 478, 484, 485
Lee SC, 466
Lee S-H, 63, 65–68, 72, 75–79, 81, 83, 84, 109
Lee SS, 369
Lee SY, 445, 477, 479
Lee TY, 777
Lee W-J, 423
Lee YHL, 439, 447, 485
Lee YM, 458
Leenhouts JM, 214, 867, 876
Lees-Miller SP, 80, 85
Leesnitzer MA, 725
Lefkowitz RJ, 481, 482, 489, 668, 671
LeGall J, 234, 237, 240, 247, 249
Legault P, 30
Legerski RJ, 75, 76, 80
Legg MJ, 41
LEHMAN IR, 347–84; 36, 62, 68, 69, 71, 77, 351, 352, 354–58, 361, 362, 365, 366, 368–70, 372, 376–78
Lehmann MS, 307, 829, 830, 832, 833
Lehrach H, 776
Lehrmann R, 391
Leib DA, 374
Leibler S, 796, 803
Leiden JM, 136
Leijonmarck M, 687
Leinbach SS, 361
Leiser A, 275
Leiter LM, 75, 76
Leith A, 690
Lelleuch AC, 330
Lemelin LL, 556
Lemer CM-R, 568
Lemere C, 387, 396
LeMeur M, 136, 146, 606, 814
Lemire BD, 866
Lemke G, 840
Lemmon MA, 211, 479, 481, 483
Lemmon SK, 516–18, 524
Lemmon V, 836
Lending CR, 478
Lendon CL, 387, 396
Leng M, 131, 141
Lenhert PG, 270, 286, 307
Lennarz WJ, 202
Lenzen C, 654
Leonard J, 811, 815, 817
Leonard KR, 689, 892
Leonhardt H, 66
Lepesant JA, 456
Leppert MF, 596
Lerner RA, 49, 50
Leschziner AE, 441
Lesk AM, 555, 562, 825, 828, 856
Lesko JG, 770, 771, 779
Leslie AGW, 719, 722, 724, 733, 741, 742, 801
Lester HA, 652, 653
LeStrange RC, 151
Leszyk J, 77
Leterme S, 421, 872
Létoublon R, 316
Letourner F, 512, 513
Leube RE, 324
Leusch MS, 466
Leussing DL, 53
Leutbecher U, 275, 299–301
Leveille GA, 582
Leviev IG, 701, 710
Levieva S, 710
Levin JR, 120, 123, 124, 126, 127, 157, 163
Levin PA, 102, 109, 110
Levine AJ, 323
Levine AS, 77
LeVine HI, 398
Levine MA, 665, 666
Levis MJ, 650
Levis RW, 462
Levison SA, 771
Levitan DA, 147
LEVITT M, 549–79; 550–52, 554, 562, 563, 567, 569, 572, 573
Levy CC, 371
Levy DB, 767, 774, 776
Levy J, 30
Lew G, 619
Lewin B, 762
Lewis DL, 421
Lewis H, 24
Lewis JI, 136, 143, 144, 797
Lewis KA, 480
Lewis PJ, 110
Lewis RA, 770, 771, 779
Lewis RB, 355, 364, 368
Lewis W, 426
Lexa D, 276, 278, 288
Li E, 317, 327
Li G, 532
Li H, 633
Li JJ, 62, 63, 68, 73, 78, 81, 137, 152, 457, 687
Li JM, 870, 898
Li K, 417, 430
Li L, 75, 76, 80
Li QQ, 149
Li Q-S, 192
Li R, 62, 74, 75
Li S, 633
Li W, 572, 573
Li X-A, 423
Li X-Y, 119
Li Y, 22, 37, 48, 291, 690
Li YH, 688, 689
Li YN, 291
Liang J, 41
Liang M, 489
Liang P, 776, 778
Liao LW, 446
Liao WF, 564, 565
Liao X-S, 430
Liautard JP, 565, 566
Libby RT, 121
Liberek K, 887, 895
Licht S, 296, 301
Lichtenberg-Kraag B, 325
Lichtenstein AH, 624
Lichtsteiner S, 317, 321
Lickteig RL, 812
Liddington R, 848, 851
Liddington RC, 848
Lidholm DA, 455
Lieberman KR, 707, 709
Liebman SW, 451
Lienhard GE, 12, 34, 43, 50
Lietzke SE, 24
Lightowlers RN, 429
Liljas A, 687
Lill R, 213, 682, 683, 864, 868, 876–84, 889–91, 898–900
Lim E, 457
Lim L, 500

Lim WA, 552, 553, 556, 562, 574
Limatola C, 500
Limauro D, 179
Lin HC, 529, 530
Lin J, 812
Lin L-L, 482
Lin S, 43
Lin X, 136
Lin YL, 65, 68, 72, 75, 76, 79, 81
Linari G, 339
Lin-Chao S, 183, 184, 186, 189
Lindahl L, 137, 152, 417
Lindahl M, 687
Lindahl PA, 275, 291, 294
Lindblom G, 203, 222–25
Linden R, 441, 466
Linder D, 275, 285, 294
Linder ME, 487, 643, 649, 650, 658, 664, 665, 668, 669
Linder P, 49
Linderoth NA, 142
Lindes DS, 24
Lindley PF, 307
Lindner R, 526, 537
Lindqvist F, 386
Lindqvist Y, 256
Lindsay EA, 622
Lindsten T, 136
Ling BN, 489
Lingner J, 185
Linke JR, 654
Linke R, 650, 651, 654
Linke S, 815–17, 820
Lin-Lee YC, 139
Linn S, 80, 427
Linn SC, 120, 157
Lipmann F, 338
Lippmann C, 643, 645, 653
Lipschitz B, 626
Lipscomb G, 722
Lipscomb WN, 41
Lipshaw LA, 600
Liptak LM, 371, 372
Lirette R, 373
Lis J, 119, 124, 140
Lis JT, 136, 140
Lisanti MP, 633, 659
Liscovitch M, 477, 491, 493, 496, 499, 500
Liscum L, 627, 629, 631, 632
Lisitsky I, 182, 192, 193
Lisitsyn N, 770, 771, 774, 777
Lisitsyn NA, 770
Lisman JJW, 328
Lisowsky T, 414, 425
Litchfield DW, 322
Lithgow T, 864, 873, 877, 878, 880–83, 892, 895
Litt M, 51
Little JW, 130, 141
Littler AJ, 853
Littler E, 355, 362, 370
Littman DR, 538
Litvinovich SV, 845
Liu B, 145, 160
Liu C, 135, 138
Liu FM, 811
Liu J, 131, 141, 587
Liu JD, 183, 184
Liu JH, 851, 852, 855, 856
Liu J-P, 513, 534
Liu JS, 587, 588, 590–92, 605, 607
Liu JZ, 800, 801
Liu K, 157
Liu L-FS, 539, 540
Liu M-L, 291
Liu NG, 763
Liu R, 605
Liu S-H, 517–19
Liu S-M, 480, 483
Liu VF, 80, 84, 85
Liu XQ, 868, 869
Liu Y-L, 480, 600, 604, 605
Liu ZC, 371, 486
Livadaras I, 455
Livingston DM, 819
Li-Xin Z, 900
Liyanage M, 491, 494
Lloyd GS, 499
Lloyd LF, 389
Lobato MF, 582, 585
Locker H, 353
Lockhardt DJ, 780
Lockhart A, 803
Lockwood MK, 136
Lodgson N, 85
Lodi T, 904
Lodmell JS, 707, 709
Loeb JDJ, 320
Loeb LA, 365
Lofsky A, 462
Loh S, 33, 34
Lohe AR, 455
Lohman TM, 65, 69
Lohse MJ, 542
Lohse PA, 24
Lois R, 136
Lokesh BR, 625, 633
Lokie JD, 386
Lomakin A, 392, 394, 395, 397, 398
Lomasney JW, 483
London E, 210, 213
London L, 128, 129
London RE, 330
Long CDW, 596
Long DM, 22, 29
Long SR, 109, 112
Longhese MP, 72, 80, 87
Longley MJ, 420
Longnecker R, 354
Loo RRO, 281
Loo S, 453
Loo SW, 599
Loomis C, 500
Loose DS, 584, 591, 593, 594
Looser R, 894, 895, 901
Lopera F, 387, 396
Lopes JM, 201, 205, 207
Lopez I, 495–97
Lopez MC, 462
Lopez-Buesa P, 873
López-Fernández LA, 766, 768
Lopilato J, 183, 186
Lorch Y, 130
Lorenzi M, 329
Lorenzoni E, 250
Loriaux MM, 811
Lorimer GH, 221, 895, 896
Lorsch JR, 22, 32, 49
Losick R, 102, 109–11
Lott MT, 429
Lotti M, 705, 711
Lottspeich F, 259, 831, 877, 879, 880, 882, 898
Lou LM, 811
Lou W, 85
Lou YC, 871
Loukeris TG, 455
Lounsbury KM, 643
Love JJ, 423
Lovelock JE, 242
Low RL, 418, 421
Lowe G, 798, 800, 801
Löwe J, 234, 237, 242, 247, 249, 253
Lowe M, 109, 512, 513
Lowe PN, 663
Lowenhaupt K, 462
Lowenstein JM, 481
Lowerson SA, 429
Lu AT, 780
Lu C, 896
Lu GG, 256
Lu H, 322
Lu W-P, 275, 294
Lu XY, 75, 76, 80, 144, 152, 153
Lu Y, 138
Lu Z, 498
Luan DD, 462, 463
Lubas WA, 320
Lubben TH, 895
Lubbers C, 375
Lucas PC, 586, 587, 590–92, 594, 595
Lucchini G, 72, 80, 87
Luche RM, 62, 73, 86
Lücken U, 726
Luckow VA, 466
Lucocq J, 529, 533
Lucocq JM, 533, 534
Ludvigsen S, 242

LUDWIG ML, 269–313; 273, 282, 283, 286, 288, 290, 291
Luft R, 430
Luhowskyj S, 851
Lührmann R, 319
Lui E, 616
Lukins FDW, 596
Lukonis CJ, 371, 372
Lukowski S, 498
Lumb MJ, 871
Lummen G, 490
Luna E, 519
Lunardi J, 732
Lund E, 153
Lundblad JR, 814, 817, 819
Luo J-Q, 498
Luo Y, 120, 144
Lupas A, 517, 518
Lupas AN, 667
Lupas JM, 667
Lupski JR, 842
Lupu F, 615
Luscher B, 818
Luse DS, 120, 121, 125, 128–30, 132, 157, 162
Lustig A, 884, 892, 895
Luthey-Schulten Z, 558
Luthi T, 317, 325
LUTKENHAUS J, 93–116; 94–104, 106–9, 111, 112
Lutter R, 719, 724, 733, 741, 742, 801
Lutterbach B, 323
Luttrell DK, 489
Luttrell LM, 489
Lygerou Z, 417, 420
Lynch F, 427
Lynden-Bell RM, 554
Lyons J, 659
Lysek-Stupp K, 600, 604, 605

M

Ma D, 664
Ma H, 489
Ma H-W, 478
Ma JY, 388, 394, 395, 397
Maa MC, 136
Maarse AC, 884–88, 894
Mabuchi I, 94
Macadre C, 464
Macara IG, 643
Macaulay C, 319
MacDonald B, 106
Macdonald LE, 134
MacDougald OA, 605
MacEachran KA, 365, 367, 371
MacFarlane J, 836, 838, 839
MacGarvey U, 426
Mache R, 193
Machesky LM, 487
Machida M, 317, 321
Macias MJ, 481
Mackay SLD, 418, 419, 422
MacKenzie L, 386, 387, 390, 393, 398
Mackie GA, 187, 189
MacNaughton EJ, 183, 184
Macpherson AJS, 424
Madan B, 552
Madden MJ, 353
Maddock J, 102
Madea M, 724
Maden BEH, 701, 705
Maderious A, 136, 144
Madhani HD, 48
Madine M, 66
Madison VS, 655
Madrid M, 845
Madsen CS, 418, 419, 422, 425, 426
Maduke M, 867
Maduskuie TP Jr, 621
Maeda KM, 739
Maeda M, 721, 724, 730, 738, 739
Maede Y, 317, 323, 325
Maegley KA, 663
Maekawa Y, 796
Maestre J, 463
Maeyer MD, 564, 565
Maga G, 77, 366
Magariyama Y, 796
Magdolen V, 902
Magee AI, 650
Maggio JE, 392, 398
Magill N, 110
Magnuson MA, 582, 583, 588, 589, 591, 592, 594, 596, 601, 605
Magnusson K, 225
Maguin E, 106
Mahaffey DT, 527, 528, 530, 532, 533
Mahillon J, 448, 466
Mahley RW, 388, 394, 395
Mahlke K, 869, 903, 906
Mahnke D, 464
Mahtani HK, 803
Maichle IB, 353
Maigret B, 563
Main AL, 845, 846
Maiorov VN, 572
Maizel JV Jr, 316, 326
Maizels N, 194
Majerfeld I, 32
Majerus PW, 476
Majumdar PK, 175
Majumder AL, 499
Makarov EM, 690, 697
Makgoba MW, 851
Makhov AM, 351, 356, 361, 362, 369, 372, 377
Maki H, 209
Makinose M, 15
Makowski I, 686
Malchiodi EL, 825
Malcolm KC, 495
Maldonado E, 80, 119, 148
Maleeff B, 386, 387, 390, 392, 393, 396, 398, 402
Malhotra A, 692, 693
Malhotra V, 513
Maliga P, 192
Malik AK, 355, 356
Malik S, 155
Mallet L, 880
Mallet WG, 523, 525, 532, 536
Maloney P, 798
Mammerickx M, 814
Mancia F, 273, 298, 299, 302, 304
Mandel G, 808, 809
Mandel M, 726
Mandelkow E, 325
Mandelkow E-M, 325
Mandell JW, 789
Mandiyan V, 488
Mangum JH, 278
Mangus DA, 414
Maniar HS, 63, 67, 72, 73, 80–82, 84, 86
Mankin AS, 701, 707
Manley JL, 130, 185
Mann K, 323
Mann V, 842
Manning DR, 489
Manning KU, 885, 886
Manning-Krieg UC, 888, 895, 896
Mano T, 738
Manor PC, 24
Manstein DG, 795
Mantegna RN, 395
Mantyh PW, 392, 398
Manzoli FA, 201
Mao JC, 365
Mao XD, 144
Maracek JF, 525
Marahiel MA, 558
Maraia RJ, 151
Marais R, 317, 321
Marakami Y, 62, 63, 66, 68
Maraldi NM, 201
Marañon C, 462
Marathe T, 75, 76
March JB, 183, 194
Marchal S, 430
Marchase RB, 317, 325, 326
Marcker KA, 705
Marcos P, 450
Marcu KB, 151
Marcy AI, 365, 366, 368, 371, 372
Maréchal D, 767, 769, 774

Margarita D, 275
Marger MD, 220
Margoliash E, 22, 900
Margolin W, 109, 112
Margolis B, 487
Margolis PS, 109
Margolis RL, 66, 488
Maridor G, 322
Marillonnet S, 457
Marin EP, 667
Marin P, 498
Marino-Alessandri DJ, 131, 141
Marion T, 62, 73, 86
Mariuzza RA, 825
Mark M, 136, 146
Mark RJ, 905
Markby DW, 649, 650, 662, 664
Markiewicz P, 193
Markley JL, 561
Markman O, 500
Markovtsov V, 122, 125, 128, 160
Marks MS, 541
Markussen FH, 871
Markwald RR, 834
Marlin SD, 851
Marliss EB, 599
Marmon S, 450
Marmorino JL, 559
Marmur J, 754
Marotti KR, 619
Marra M, 275
Marraccino RL, 85
Marrero MB, 489
Marsault J, 421
Marsden HS, 355, 359, 363–65, 367, 369, 371
Marsh D, 215, 900
Marsh ENG, 274, 275, 285, 296, 299, 301, 302, 308
Marsh K, 851
Marsh M, 538
Marsh T, 22
Marsh TL, 29
Marshak DR, 85
Marshall MS, 646, 655, 656, 659, 663
Marshall NF, 119, 124, 129, 150, 156
Marshall S, 329, 330
Marshallsay B, 892
Marszalek J, 887
Martel M-B, 316
Martens GJM, 341
Martens PA, 422
Martin BM, 522, 537, 619
Martin DM, 482
Martin DW, 354, 356
Martin E, 160
Martín F, 462
Martin J, 461, 864, 894, 895, 897, 903, 906
Martin NC, 871
Martin RB, 660, 864
Martin RP, 864
Martin SL, 463
Martinez R, 352, 355, 356
Martineza C, 500
Martinson HG, 136
Martinus RD, 864
Martogilo B, 213
Marton RF, 64, 68, 77
Marusak R, 696, 703, 704
Marzilli LG, 289, 307, 308
Marzilli PA, 307
Marzluff WF, 151
Masatomo M, 726
Masiakos PT, 735, 738
Masiarz FR, 514
Masliah E, 396
Mason JM, 462
Mason KT, 338, 342
Mason SW, 152
Mason TL, 707, 712
Masquilier D, 606, 814
Massenberg D, 491, 494
Massey V, 240
Massicotte H, 211
Masson C, 322
Masta A, 131, 141
Masters BS, 414
Masters CL, 387
Masters M, 183, 184, 186, 194
Masters SB, 650, 655, 658, 659, 661, 669
Mastrangelo IA, 69, 81, 85
Matathias AS, 583
Mather EL, 136, 778
Mathes M, 317, 324, 325
Matheson AT, 112, 680
Mathews JT, 366, 368
Mathias P, 847
Mathias SL, 456, 462, 463
Mathur SN, 616, 617, 625, 633
Matias PM, 643
Matiaszuk NV, 285
Matouschek A, 894, 895, 896, 901
Matsubara K, 779
Matsuda H, 617, 624
Matsuda T, 75, 76, 80
Matsui T, 720, 722, 730, 739
Matsui Y, 477, 601
Matsuka YV, 845
Matsukage A, 420
Matsumoto AK, 518
Matsumoto K, 77, 205
Matsumoto T, 78, 79
Matsumoto Y, 180
Matsunaga T, 74, 75, 80
Matsuno-Yagi A, 729, 734
Matsuzaki H, 121, 124, 130, 203, 205, 208, 481
Mattai J, 224
Mattaliano RJ, 517
Matte A, 583, 584
Mattera R, 666, 667
Matteson J, 670
Matthaei S, 329
Matthews BW, 43, 553, 556, 562
Matthews NT, 480
MATTHEWS RG, 269–313; 273, 275, 278–83, 285–89, 291
Matthews RP, 811
Matthies HJG, 627
Mattingly TW, 7
Matz B, 355
Mauco G, 489
Maul GG, 318
Maupin-Furlow J, 275, 294
Maurer RA, 811
Maurice DH, 484
Maury M, 599
Maxam AM, 349, 352
Maxfield F, 623
Maxfield FR, 623, 632
Maxon ME, 141
May EW, 449
May RP, 692
Mayall TP, 424
Mayanil CS, 895
Mayer A, 876, 878, 880, 879, 883, 884, 891, 898–900
Mayer F, 275, 294, 725, 726
Mayford M, 833
Mayhew M, 897
Mayne L, 558
Mayorga RA, 596
Mayr JA, 499
Mayrleitner M, 525
Mazumder R, 298
Mazzotti G, 201
Mazzotti M, 525, 539, 541
McAlister MSB, 856, 857
McAlister TJ, 106
McAllister WT, 134
McAlpine AS, 234, 237, 242
McAuley-Hecht K, 373
McBlane JF, 448
McBride HM, 864, 870, 898, 899
McCaffery JM, 513
McCammon JA, 22
McCarthy BJ, 754, 758, 760, 762
McCarty JS, 104, 887
McCarty RE, 739–41
McCauley R, 899
McClain DA, 329, 330, 538
McClements WL, 356–58
McClure WR, 443
McConnell HM, 567
McConnell K, 85
McConnell TS, 22, 23, 30, 37, 40, 47, 52

McCormick F, 99, 640, 641, 643, 644, 646, 650, 655, 663, 664, 670
McCormick JR, 111
McCracken S, 144, 156
McCreery M, 619
McDevitt MA, 136
McDonagh J, 843
McDougall I, 352
McDowall A, 853
McEvoy LM, 851
McEwan AG, 237, 241, 247
McEwen JE, 430
McFadden BA, 175
McFie PJ, 590, 592
McGeoch DJ, 355, 356, 359, 363, 364, 372
McGhee JD, 211
McGill L, 731
McGookey DJ, 630
McGrane MM, 588, 590, 594, 601, 605, 607
McGrath S, 80, 84
McGregor RA, 478, 485
McGuinness BF, 386
McHenry CS, 77
McInnes JL, 766, 768
McIntosh LP, 724
McIntyre TM, 201
McKay DB, 24, 517, 537
McKeever MO, 512, 516
McKie N, 275, 302
McKiernan C, 643
McKinley DN, 533
McKnight GS, 811
McKnight SL, 809
McKown RL, 449
McLachlan AD, 572
McLaren A, 757
McLaren RS, 187
McLaughlin K, 73
McLaughlin S, 211, 481
McLaury HJ, 124
McLean GW, 369
McMonagle EC, 353
McMorrow I, 320
McMullin TW, 428, 895
McNab D, 355, 363, 364
Mcnab RM, 743
McNamee PN, 856, 857
McNiven MA, 536
McNulty S, 499
McPhalen CA, 555
McPherson A, 24, 641
McPherson DC, 854
McPherson PS, 525, 534, 535
McSweeney S, 273, 298, 299, 302, 304
McSwiggen JA, 157
McVey GL, 365, 367
McWilliams GL, 631
McWilliams K, 143
Meadows RP, 481
Meagher RB, 193
Mealli C, 308
Means AR, 811
Meares CF, 696, 703, 704
Mecklenburg KL, 464
Mecocci P, 426
Medina-Vera L, 317, 323
Medved LV, 845
Meegs B, 207
Mégarbané B, 542
Megraw TL, 425
Mehlhorn I, 401
Mehrabian M, 622
Mehta AD, 787
Mei LH, 213
Mei R, 22, 32, 41, 45, 47
Meier E, 319
Meier KE, 491
Meier TI, 120, 123, 128, 157, 159, 160, 163
Meier TW, 296, 297, 300, 301
Meigs TE, 626
Meijer M, 864, 884–87, 890
Meikrantz W, 317, 322
Meima ME, 479
Meiner VL, 621, 622
Meinjohanns E, 322
Meinkoth JL, 810, 812, 813, 815
Meisner HM, 585, 591, 593
Meister M, 484, 798, 800–2
Melancon P, 709
Melander L, 301
Melander Y, 704
Melchior GW, 619
Melchiorri P, 339–41
Meldal M, 322
Meldrum E, 478
Melendy TE, 62, 77, 78
Melese T, 733, 740
Mellman I, 512, 629, 866
Mellon PL, 808
Ménard L, 530, 542
Mencher D, 599–601
Mencia M, 143
Mendel-Hartvig J, 742
Mendelsohn C, 136, 146
Mendler M, 847
Mendoza JA, 221
Menendez M, 139
Menold MM, 884, 885
Menzel P, 809, 811, 815, 817
Merchant F, 398
Merida I, 500
Merkel G, 448, 467
Merkel R, 787
Merluzzi VJ, 851
Merrick WC, 641
Mertuka G, 560
Meselson M, 754
Mesmer RE, 30
Mestel R, 400
Mesters JR, 662
Metherall JE, 618, 633
Metoz F, 803
Metz RJ, 583
Metzenberg RL, 880
Meulia T, 119, 136, 146, 148, 151
Meunier B, 464
Meyer1 AM, 851
Meyer EF Jr, 642
Meyer M, 500
Meyer TE, 809, 812
Meyerowitz EM, 534
Meyers AM, 872
Meyuhas O, 584, 600, 601
Meza-Keuthen S, 329
Miake-Lye R, 666
Miao B, 888
Michaelis G, 901
Michaelson P, 604, 606
Michalides RJAM, 834
Michel C, 271, 275, 296, 300
Michel F, 44, 45, 47, 463, 464
Micheletti PA, 364, 367
Michels WJJ, 22
Michenfelder M, 302
Micol V, 151
Miczak A, 189
Middlesworth W, 770, 771, 777
Middleton B, 626
Middleton P, 650
Migliorini MM, 845
Mignogna G, 340, 341
Mignotte B, 418, 421
Mignotte-Vieux C, 458
Mihara K, 864, 865, 868, 869, 872, 873, 875, 882, 884, 895, 899
Mikhailova TG, 491
Miki J, 738
Miki K, 720
Miki Y, 463
Miklos D, 895
Milan S, 122, 123, 132, 161
Milan SC, 131, 132
Milburn MV, 643, 645, 646, 652, 653, 655, 660, 662
Mildvan AS, 721
Mileykovskaya EI, 217, 218
Milgrom YM, 729, 730, 733
Milla ME, 558
Millar DG, 864, 870, 877, 878, 898, 899
Millar N, 795
Miller AD, 274
Miller BR, 880, 904
Miller CG, 721
Miller DD, 900
Miller DL, 641, 654, 655
Miller JH, 193
Miller K, 536

Miller MF, 399, 402, 404
Miller MJ, 735
Miller MW, 319, 320
Miller R, 317, 318, 321
Miller RT, 655, 658, 669
Miller S, 833
Milligan G, 650
Milligan S, 490
Mills GB, 481
Milot E, 447
Mims MP, 395
Min DS, 485
Minakata H, 340, 341, 343
Minami R, 328, 463
Minchew P, 709
Minchey SR, 227
Mindell DP, 423
Miner JN, 592
Minkov IB, 729–31
Minson A, 370
Mira JP, 498
Mitchell J, 485
Mitchell MB, 289, 308
Mitchell P, 420, 697, 700, 701, 709, 711, 729, 800
Mitchison TJ, 49, 99
Mitoma J, 870
Mitropoulos KA, 617, 626
Mitschler A, 686
Mitsis PG, 62, 68, 69, 71, 77, 78, 84
Mitsuhashi Y, 149
Mitsui S, 872, 873
Mitsui T, 225
Mitsuzawa H, 885, 894, 895
Mittal R, 658, 663, 664
Miwa K, 722
Miwa S, 558, 561
Miwa Y, 743, 744
Mixon MB, 643, 649, 650, 657, 669
Miyajima N, 185
Miyakawa I, 425
Miyake S, 64, 68
Miyamoto K, 149
Miyanaga M, 722, 723
Miyata H, 787, 795
Miyatake T, 429
Miyazaki A, 617, 624, 632
Miyazawa S, 572
Miyoshi Y, 463
Mizusawa H, 387, 396
Mizushima S, 213, 214
Mizushima T, 211
Mizutani T, 479
Mizuuchi K, 440–44, 448, 449, 458, 459
Mizuuchi KM, 460
Mizuuchi M, 444, 460
Mizzen LA, 895
Mkhitaryan AG, 556
Moazed D, 681, 683, 690, 696, 697, 701, 704
Mocarski ES, 352, 353, 355, 362, 377, 378
Mochizuki K, 730
Mochly-Rosen D, 488
Moczko M, 877–80, 882
Modesti A, 603
Modesti NM, 789
Moens L, 574
Moerman DG, 446
Moessner R, 855
Moffat B, 401
Mogi H, 632
Mohammad F, 371
Mohanty BK, 145
Mohr G, 29
Mohr S, 414
Mohrs K, 894, 896
Moine H, 709
Mok M, 136, 144
Molina CS, 813
Moll I, 324
Moll J, 294
Moll T, 892
Möller W, 641
Mollinedo F, 492, 499
Monaco AP, 120, 145, 770, 771, 777
Monaco L, 606, 813, 814
Monaghan AP, 606
Monahan JE, 583
Monahan SJ, 364, 367
Moncollin V, 80
Monfries C, 500
Monge A, 569
Monod J, 43, 625
Monro RE, 701, 705
Monsalve M, 143
Monsigny M, 316
Montagne JJ, 340
Montecucchi PC, 339
Monteiro MJ, 325
Montell C, 478, 490
MONTMINY M, 807–22; 808–17, 819, 820
Montoya J, 191, 194, 412
Moolenaar CECK, 834
Moolenaar WH, 500
Moomaw CR, 491, 493, 494, 496, 501, 646
Moon KH, 478
Mooney BP, 873, 882, 895
Moore DP, 450, 451
Moore KJM, 663
Moore MJ, 24
Moore MS, 527, 529, 530, 533
Moore PB, 24, 648, 652, 680, 683, 687
Moore RL, 175
Moore S, 6
Moore SP, 62, 81
Moorehead R, 426
Moorman AFM, 601, 605
Moos M, 836
Mooslehner K, 447
Moqadam F, 770, 771, 774
Mor A, 339–41, 343
Morais R, 419, 423
Moran JV, 462–64, 466
Moran MF, 542
Moran S, 22, 37, 41, 47
Moras D, 24, 852
Morein S, 203, 225
Morel DW, 624
Morell JL, 338
Moreno FJ, 582, 585
Moreno MA, 457
Moreno RD, 392, 397
Morgan AR, 350, 351
Morgan GT, 136
Morgan L, 663, 722
Morgan MW, 629
Morgan WD, 157
Morgan-Hughes JA, 429
Morgenbesser SD, 136
Mori H, 706, 707
Mori I, 446
Mori M, 873, 874
Morikawa K, 556, 562, 641
Morino Y, 873, 874
Morioka S, 491
Morita T, 386, 390, 393
Moritani C, 722, 723
Moritz A, 500
Moritz RL, 685
Moriyama Y, 724, 726
Morocho AM, 480
Morris AJ, 477, 481, 483–85, 491, 493
Morris HP, 191
Morris HR, 317, 321, 325, 326, 329
Morris KN, 32
Morris SA, 526
Morrisett JD, 395
Morriss-Kay GM, 843, 855
Morrow BE, 130, 150
Morrow JS, 832
Morse LS, 350, 351
Morten K, 424
Morton AG, 553
Morton JG, 758, 760, 762
Morvillo MV, 418
Mosbaugh DW, 420, 427
Mosig G, 378
Moss B, 120, 143, 149
Moss DS, 566
Moss J, 494
Moss N, 375
Moss SE, 530
Mostov KE, 523, 525, 532, 539

Mote J Jr, 130–32, 149, 162
Motley A, 871
Mott HR, 856, 857
Mou CY, 552
Mounolou J-C, 421
Mount DW, 364, 367
Mount SM, 456
Moura I, 234, 237, 240, 247, 249, 251, 257
Moura JJG, 251, 257
Mourey RJ, 525
Mousli M, 664
Moy VT, 787, 788
Moyle J, 729
Mozo T, 869, 904
Mu D, 74, 75, 80
Mucke E, 552
Mueller DM, 731
Mueller F, 688, 690, 692, 697
Mueller MW, 464
Mueller VL, 599
Muetterties MC, 257
Muirhead B, 375
Mukherjee A, 95, 96, 98–100
Mukherjee S, 614
Mukund S, 234, 237
Mulder E, 97, 106, 107
Mullen JR, 63, 67, 72, 73, 81, 82, 84, 86
Muller EC, 711
Muller F, 461
Müller H, 878, 885, 887, 888, 894
Muller HP, 447, 448
Muller IM, 828
Muller MT, 371
Muller N, 901
Muller R, 365
Muller S, 427, 901
Müller V, 736
Mullick J, 418
Mulliez E, 288
Mullis KG, 317, 325, 326
Multhap G, 392, 398
Mumby SM, 650, 668
Mumenthaler C, 570, 571
Münck E, 275, 291, 294
Muncy L, 355, 356
Mundigle O, 534
Mundy D, 534
Muneyuki E, 729–31, 739
Munn AL, 536
Munn M, 62, 79
Munoz RM, 356
Munro S, 632
Munroe D, 190
Munson M, 556, 562, 574
Murakami H, 873, 874, 879
Murakami K, 873, 874
Murakami T, 667
Murakami Y, 62, 67, 68, 77–79, 83, 84
Murakawa GJ, 179, 180
Muramatsu M-A, 482
Muramoto K, 796
Murante RS, 79
Murata M, 633
Murataliev MB, 729–31, 733
Muratani K, 463
Murfitt D, 298
Murgola EJ, 710
Murphy BR, 136, 144
Murphy CI, 324
Murphy EJ, 633
Murphy FL, 44
Murphy J-E, 317, 325, 519, 526
Murphy M, 364, 365, 367
Murphy RM, 398, 399
Murray AW, 349, 352
Murray BA, 833, 835
Murray PJ, 317, 327
Murthy S, 633
Murti KG, 66
Murugesan G, 490
Murzin AG, 666, 857
Musacchio A, 481, 664
Müsch A, 535
Musiani P, 603
Musicco C, 421
Musier KM, 741
Mustaev A, 125, 160
Muto A, 685
Myer D, 624
Myers AM, 894, 895
Myers HM, 621, 622
Myers JA, 731
Myers KA, 427
Myerson D, 766

N

Naas TP, 462, 463, 466
Nachaliel N, 585
Nacken W, 457
Nadal-Ginard B, 66
Naga K, 687
Nagafuchi A, 829
Nagai K, 485, 687
Nagakura T, 722, 723
Nagano T, 895
Naganuma S, 632
Nagao A, 500
Nagar B, 829, 831, 832
Nagase T, 877, 878
Nagayama K, 720
Nagi AD, 556, 562, 574
Nagley P, 430, 895, 904
Nagoshi RN, 439, 452
Nagy L, 627, 632
Nagy P, 604, 606
Naiki H, 390, 391, 395, 398, 401
Naim HY, 533
Nakada S, 767, 769, 774
Nakafuku M, 648
Nakagawa A, 273, 298, 299, 302, 304
Nakagawa H, 255
Nakagawa M, 64, 68
Nakai H, 453
Nakai M, 872, 873, 877–80, 883, 885, 887, 894, 895, 899
Nakajima T, 817–19
Nakakuki K, 390, 391, 395, 398, 401
Nakamoto JM, 671
Nakamoto RK, 719, 724, 739
Nakamura A, 262
Nakamura CE, 40
Nakamura F, 328, 484, 486
Nakamura GK, 24
Nakamura H, 556, 562, 565
Nakamura K, 177
Nakamura M, 341
Nakamura S, 425, 651, 652
Nakamura S-I, 659
Nakamura Y, 185, 479
Nakanishi O, 478, 489
Nakanishi T, 149
Nakano A, 149
Nakano H, 491
Nakano M, 218
Nakao T, 328
Nakaoka H, 490
Nakashima S, 479, 486, 492, 494–97
Nakatani Y, 819
Nakatsu Y, 75, 76, 80
Nakayama H, 225
Nakazato H, 175
Nakhimovsky L, 110
Nalefski EA, 482
Nambudripad R, 666
Nanao K, 843
Nandan S, 397, 402
Nantel F, 606, 814
Nanthakumar E, 462, 463
Nardelli M, 418
Nargang FE, 864, 878, 880, 879, 883, 889, 891, 898–900
Narita K, 485
Narita N, 463
NARLIKAR GJ, 19–59; 22, 27, 30, 37, 38, 40, 48
Narlikar JV, 50
Nash CR, 658, 667
Nash HA, 440, 441
Nasheuer HP, 62, 63, 68, 74, 78
Naslund J, 386
Nasmyth K, 85
Nass MMK, 419, 422
Nassar M, 644, 646, 655
Nassar N, 655, 656
Nassif N, 456

Nassif NA, 456
Natarajan V, 498
Nath A, 584
Nath C, 728
Nathanson N, 5
Näthke I, 516, 517, 519
Näthke IS, 517, 518
Natori S, 149, 211
Natsoulis G, 451, 870
Nave KA, 840
Navon SE, 667
Naya Y, 341, 343
Naylor AM, 357, 358
Naylor DJ, 864, 895
Neal SE, 654
Neame PJ, 255
Nechushtan H, 587, 588, 591, 592, 601
Nedospasov SA, 136, 139
Neecke H, 80, 87
Needham LA, 851
Neer EJ, 653, 665–67, 669, 671
Neet KE, 625
Neff N, 120
Negri L, 339–41
Nehls C, 490
Nelen MR, 425, 426
Nelson H, 726
Nelson KJ, 136, 585
Nelson NJ, 355–57, 371, 372, 726
Nelson WJ, 829
Nemerow GR, 847
Nero D, 904
Nervi F, 632
Nesbitt JA, 202
Nesmeyanova MA, 214
Nett J, 723
Netter P, 47
Nettesheim D, 843
Nettikadan S, 726
Neubig RR, 659, 667, 671, 672
Neufeld BR, 756, 766
Neufeld EB, 627, 629
Neufer PD, 430
Neuman KC, 227
Neumann R, 764
NEUPERT W, 863–917; 410, 864, 868, 869, 872, 876, 877, 879, 882, 888–91, 895, 900, 901, 905, 906
Neurath H, 43
Nevins JR, 136
Nevskaya N, 687
Newbold CI, 851
Newbury SF, 187
Newham P, 853
Newlands J, 133, 149, 162
Newlon CS, 77, 145
Newman G, 451
Newman LS, 512, 516
Newman MJ, 218
Newman MV, 596
Newman SM, 425
Newmeyer DD, 319
Newport JW, 62, 64, 66, 75, 84, 85
Newsome D, 817, 819
Newton A, 175
Newton AC, 201, 204, 208
Newton NW, 236
Neyton J, 884
Nguyen M, 864, 870, 899
Nibbeling R, 900
Nicholas RA, 478, 484, 485
Nicholl ID, 326
Nichols AF, 80
Nichols M, 815, 819
Nicholson D, 871, 896
Nicholson DW, 899, 900
Nicholson H, 556, 562
Nicholson RE, 236, 255
Nickles T, 24
Nicolas P, 340, 343
Nicolay K, 868, 892
Nie S, 307
Nielsen EA, 759, 761, 766, 774, 776, 778
Niemeyer B, 207, 490, 491
Nierhaus KH, 680, 683, 692, 705, 707, 708, 711, 712
Nierlich DP, 120, 179, 180, 191
Nierman WC, 120
Nieschlag E, 606
Niezen KK, 896
Nigg EA, 319, 322
Niidome T, 341, 895
Nijkamp HJ, 443, 457
Nikaido H, 203, 204
Nikawa J, 206
Nikiforov V, 128, 132, 157, 159, 160, 163
Nikonov S, 687
Nikulin A, 687
Nilges M, 71, 481, 687
Nimmo E, 449
Ninio J, 684
Niranjan BG, 426, 427
Nisbet IT, 491
Nishibe S, 483, 487
Nishihara M, 225
Nishii I, 559, 560
Nishijima M, 206, 207, 215
Nishikawa J, 819
Nishikawa K, 685
Nishikiori S, 559
Nishimoto T, 350, 377
Nishimoto Y, 420
Nishio H, 463
Nishisho I, 463
Nishiyama Y, 365
Nishizaka T, 787, 795
Nishizawa Y, 341
Nishizuka Y, 476, 495
Nissen P, 643, 645, 648, 653, 656, 663, 683
Nissen-Meyer J, 339
Nitsch RM, 392
Niu HH, 85
Nizielski SE, 586, 590, 592
Nobes CD, 494
Nobrega FG, 869, 905, 906
Nobrega MP, 869, 897, 905, 906
Nodwell JR, 152
Noe JS, 136
Noel JP, 41, 643, 644, 648, 650, 656, 657, 660, 661, 669
Noh D-Y, 477, 479, 487, 489
Nohturfft A, 626, 631
Noisin EL, 586, 587, 590–92, 595
Noji H, 742
Nojima H, 477
Noll E, 456
Noll W, 622
NOLLER HF, 679–716; 23, 48, 681, 683, 685, 690, 692–94, 696, 697, 699–701, 703–5, 708
Nolte RT, 481
Nomizu M, 846
Nomoto K, 340, 341, 343
Nomura K, 149
Nomura S, 770, 771
Nonaka I, 428, 429
Nonet ML, 531
Nonhebel DC, 302
Norbury C, 85
Nordheim A, 818
Nordstrom K, 106
Norman D, 843
Noronha AB, 840
Norris GE, 555, 562
Norris V, 106
Norskov-Lauritsen L, 641, 643
Northup JK, 485, 651, 652
Norum KR, 614
Nose A, 829
Nossal R, 533
Nossen JO, 633
Noten JF, 136, 144
Notka F, 618
Nouffer C, 513, 538, 539
Noumi T, 724, 738
Nouwen N, 214
Novak U, 151
Novick P, 525, 534
Noviello L, 340, 341
Novotny J, 366
Nowak L, 484
Nowakowski J, 24
Nowotny P, 692
Nowotny V, 692
Nozawa Y, 486, 496, 497
Nudler E, 122, 127, 128, 143, 157, 159, 160, 163

Nugent JM, 903
Nukada T, 484, 486
Nukina N, 387, 396
Nunnari J, 905
Nuoffer C, 643
Nürnberg B, 650
Nurse K, 697, 707–9
Nurse P, 85, 94
Nussbaum RL, 770, 771, 779
Nutile-McMenemy N, 622
Nuttall S, 878
Nyame K, 317, 327
Nyborg J, 640, 641, 643, 645, 647, 648, 653, 655, 663
Nye SH, 316, 900
Nygard O, 704
Nyman PO, 374
Nystrom RF, 296

O

Oakes MI, 688
Oas TG, 558
Oatey PB, 871
Obana E, 211
Obar RA, 534
Obeid LM, 201
Ober B, 825
Obermeier A, 489
Obreque VH, 466
O'Brien C, 741
O'Brien ET, 99
O'Brien R, 481, 483, 556, 562, 574
O'Brien RM, 583, 586, 590–96
O'Brien T, 140
Ochi H, 559
Ochoa S, 298
Ochs HD, 770, 771, 777
O'Connell P, 67
O'Connor M, 707, 709
O'Connor PJ, 427
Oda K, 767, 769, 774
Oda T, 873
Odaka A, 387, 396
Odaka M, 739
Odell GM, 789
Odenwald WF, 456
Odermatt E, 843
Odom OW, 681, 682, 700
O'Donnell ME, 355, 362, 365, 366
Oefner C, 41
Oehler T, 818
Oelgeschlager M, 818
Oellig C, 457
Oettgen AB, 29
Ofengand J, 697, 708
O'Farrell PH, 121, 146
Öfverstedt L-G, 691
Ogawa T, 426
Ogawa Y, 24
Ogier-Denis E, 316
Ogino C, 497
Ogishima T, 895
Ogryzko VV, 819
Ogura N, 255
O'Hagan D, 273, 297
O'Hair M, 462
O'Hara EB, 187, 188
O'Hara M, 352
O'Hara P, 144
O'Hare P, 355, 367, 368
Ohba R, 77
Ohgi K, 699
Ohguchi K, 496, 497
Ohgushi M, 558
Ohman T, 395
Ohno H, 513, 521, 525, 539–41
Ohta A, 208, 216
Ohta N, 175, 340
Ohta S, 429, 722, 873
Ohtsuka K, 873
Ohtsuka T, 215
Oishi M, 770, 771, 774
Ojala D, 191, 194, 412
Oka K, 618, 619, 622, 634
Okada H, 854
Okada M, 205
Okazaki H, 892
Okazaki S, 462
Okazaki T, 145
O'Keeffe LM, 895
Oku H, 262
Oku N, 482
Okubo K, 779
Okwu AK, 617, 630
Olate J, 650
Old IG, 275
Oldenburg M, 735
Oldfors A, 424
Oldread E, 819
Olefsky JM, 329
Olejniczak ET, 481
Olender EH, 626
Olins PO, 466
Olivares M, 462
Oliver DB, 210, 212, 213, 356
Oliver IR, 183, 184, 194
Oliver IT, 599, 600
Oliver M, 593
Oliver NA, 429
Oliver T, 787
Olivera BM, 341
Olivo PD, 356–58, 363, 365, 368, 371, 372, 422
Olmedo G, 110
Olsen GJ, 29, 112
Olsen JW, 361
Olsen KW, 852
Olsen LC, 373, 871
Olson JW, 361
Olson MW, 420
Olson SC, 493
Olsson I, 766, 768
O'Malley BW Jr, 608
Omary MB, 316, 317, 321, 324, 326
Omata S, 319
Omori A, 316
Omote H, 719, 721, 724, 726, 730, 739, 742
Omura T, 864, 868, 869, 872, 873, 875, 882, 884, 892
O'Neal CC, 729
O'Neill TE, 130
Ong AM, 740
Onge LS, 608
Ono H, 873, 874, 879, 899, 901
Ono K, 211
Ono M, 188
Ono S, 899
Ono Y, 481
Onrust R, 366, 649, 650, 662, 664
Onuchic JN, 558
Ooi CE, 532
Oorschot V, 512
Oppenheim J, 896
Oppliger W, 866, 884–86, 888–900, 895, 894, 905
Orberg PK, 354
Orci L, 494, 501, 512, 513, 527, 532
Orengo CA, 566
Orgel LE, 447
O'Riordan V, 872
Orkin SH, 602
Orland H, 559
Orle KA, 449, 454
Orlova EV, 688, 690, 692
Orlova M, 133, 148, 149, 162
Örlygsson G, 302
Orr A, 364
Ortega-Barria E, 317
Orth KL, 364–66
Ortiz PJ, 175, 183
Ortolan LG, 148
Osborn AH, 317, 327
Osborn L, 851, 853
Osborne BI, 457
Osborne C, 278
Oschkinat H, 481
Oshima T, 651, 652
Oshimura M, 80, 85
Osmundsen H, 633
Ossa J, 387, 396
Osswald M, 697, 700, 701, 709, 711
Oster GF, 789, 890
Ostermann J, 885, 887, 888, 894, 895, 901, 905
Osteryoung KW, 113
Ostrander M, 365

Ostrom JA, 532, 535
Otani H, 616
Otaward-Hamamoto Y, 722
Otlewski J, 43
O'Tousa JE, 490
Otsuka T, 478
Ott A, 353
Ott MO, 599
Ott-Hartmann A, 353
Ottina K, 218
Otto A, 711
Otto-Bruc A, 657, 658
Otwinowski Z, 555, 896
Ou CN, 590, 602, 606
Ou W, 892
Ou WJ, 895
Oubridge C, 687
Ouzounis C, 572
Overbeck AF, 670
Overdijk B, 328
Overduin M, 829, 831, 832
Overman MJ, 390, 391
Owen D, 643
Owens GS, 833
Ownby JD, 175
Owsianka AM, 365, 367
Oyanagi K, 328
Oyaster S, 600
Ozaki N, 179
Ozaki S, 481
Ozawa K, 63, 67
Ozawa T, 426

P

Paabo S, 423
Pace AM, 650, 659, 661
Pace B, 29
Pace N, 22
Pace NR, 28, 29
Paces V, 895
Pacheco A, 258
Paciotti V, 87
Padgett RA, 46
Padmakumar R, 291, 296, 300, 308
Padmanaban G, 136
Pagan J, 738
Page LJ, 515, 516, 521, 524, 525
Page MGP, 217
Page MI, 14, 35, 40
Pagel J, 414
Pagés F, 486
Pagés JM, 222
Pagliara AS, 599
Pai EF, 643, 645, 646, 660
Paik SR, 725, 740
Pain D, 873, 874, 879
Pak WL, 478
Pak YK, 867, 868, 879
Pal S, 456
Palade GE, 688
Palaniappan C, 77
Palermo RE, 655
Palfreyman JW, 352
Pali T, 726, 743
Palleros DR, 895
Palmer AG 3rd, 142
Palmer CR, 814
Palmer E, 770, 771, 777, 779
Palmer FBS, 617, 624, 629
Palmer JD, 903
Palmieri F, 869, 879
Palmisano A, 879
Paltauf F, 499, 864, 877, 878, 882
Paluh JL, 416, 417
Pan C, 707, 712
Pan J, 47
Pan T, 29
Pan Y-CE, 726
Pan Z-Q, 75, 77, 85, 86
Panayotou G, 542
Pandes M, 156
Pandey NB, 151
Pandit UK, 280
Pang I-H, 484, 668
Panico M, 317, 321, 325, 326, 329
Panini SR, 633
Pänke O, 734
Pannell LK, 499
Pantaloni C, 667
Panté N, 320
Papa S, 739
Pape ME, 616, 618, 619, 622
Pape T, 684
Paques F, 456
Parada CA, 143, 152, 156
Paradis MD, 392, 398
Pardee AB, 776, 778
Pardi A, 30, 32, 687
Pardon B, 123, 131
Pardue ML, 462
Parente RA, 227
Parenti M, 650
Parham P, 513, 514, 517–19, 537
Parimoo S, 771
Paris S, 498
Parish CA, 484
Parisi MA, 151, 414, 425
Park BH, 569, 573
Park C-H, 74, 75, 80, 85, 86
Park D, 478, 484–86
Park DJ, 478, 485
Park EA, 587, 588, 590–93
Park JT, 98, 99
Park J-W, 426
Park MK, 317, 318, 320
Park MS, 75, 76
Park M-Y, 730, 738, 739
Parker CM, 832
Parker D, 817, 818
Parker PJ, 478, 481, 482, 484, 486, 498
Parkinson JS, 183, 184
Parlato G, 654
Parmeggiani A, 654, 662, 663, 684
Parris DS, 355, 364, 366–68, 371, 372
Parry ME, 363, 369
Parsonaage D, 737, 738
Parsons MR, 83
Parsons R, 767, 774, 776
Parsons WL, 417
Parton RG, 512
Partridge SR, 97
Pas E, 95
Pascal E, 816
Pascal SM, 487
Pascopella L, 457
Pasion SG, 66
Paskewitz SM, 461
Pastore A, 828, 857
Patanjali SR, 771
Patchett ML, 275
Patel AH, 371
Patel AJ, 151
Patel DJ, 24
Patel MS, 599, 763, 765, 766, 768
Patel NH, 838
Patel PI, 842
Patel SS, 744
Patel YM, 582, 584, 587, 588, 590, 594, 599, 605, 607
Pateman JA, 237
Paterno SA, 30
Paterson AJ, 329, 330, 478, 483, 485
Paterson BM, 136
Pathak N, 796
Patil CK, 80, 85
Patsch W, 139
Patterson B, 48
Patterson M, 351, 352
Patterson MC, 629
Patthy L, 858
Patton WA, 491, 494
Paul L, 275, 295
Paul S, 213, 220
Paul WE, 759, 761, 766
Paule MR, 119, 130
Pauling L, 43
Paulsen H, 322
Paulson JC, 328
Paulssen RH, 486
Paulus BF, 65, 68
Paulus H, 175
Pause A, 147
Pavco PA, 131, 418, 421
Pawelczyk T, 481
Pawson T, 479, 488
Paxton WG, 489
Payne ES, 481

Payne GS, 516, 518, 520, 536, 542
Payne JM, 322
Payne WE, 477, 478
Payrastre B, 489
Pchelintseva O, 879
Pearce SR, 457
Pearl L, 373
Pearse BMF, 513–16, 519, 520, 524, 538–40
Pearson CK, 362, 365, 370
Pease AC, 780
Pechik I, 847
Peck D, 834
Peck LJ, 131
Pedemonte CH, 316
Pedersen LG, 660
Pedersen PL, 720, 721, 729
Pederson NE, 352
Pedretti J, 207
Peeler JS, 515, 523, 527, 528, 530, 532, 533
Pehl M, 146
Peitzsch RM, 211
Pelchen-Matthews A, 538
Peleg Y, 872
Pelegrin M, 596
Pelisson A, 462
Pelleschi M, 868, 884
Pellicena-Palle A, 516–18, 524
Penczek P, 688–90
Penefsky HS, 719, 725, 729, 732, 737
Peng J, 150, 156
Peng SB, 743
Peng Z-Y, 559
Penin F, 728
Penman S, 191
Penn RB, 542
Penney J, 456
Pentchev PG, 627, 629
Pepe G, 418, 420
Pepinsky RB, 851, 852
Pepperkok R, 512, 513
Peracchi A, 32, 43, 48
Peralta D, 895
Peralta EG, 664
Peranen J, 633
Perdew M, 478, 490
Perdew MH, 478
Pereira MEA, 317
Perez CA, 392, 397
Perez DM, 490
Pérez JA, 734
Perini G, 814
Perisic O, 479, 480, 482
Perkins WR, 227
Perlman ME, 330
Perlman PS, 46, 425, 440, 463–65, 467
Perrella FW, 480
Perrimon N, 456
Perrotta AT, 22, 45
Perry D, 497
Perry HC, 356–58
Perry LJ, 355, 363, 364
Perry RP, 136
Perryman B, 902
Perryman RA, 882
Person S, 352
Persson BL, 220
Persson R, 374
Pertile P, 493
Peruski LF, 812
Peskin CS, 789, 890
Pesold-Hurt B, 866, 905
Pesole G, 420
Peter ME, 647, 657
Peterlin BM, 136, 143, 144, 152, 153
Peters E, 187, 188
Peters ID, 558
Peters PJ, 532
Peters S, 322
Peters TJ, 424
Peterson A, 481, 856
Peterson CA, 75, 76, 80
Peterson CL, 154
Peterson DD, 593, 594
Peterson SR, 80, 85
Peterson T, 457
Petfalski E, 420
Petitjean M, 552
Petratos K, 41
Petros AM, 481
Petsko GA, 643, 645, 660
Pettegrew JW, 386
Pettepher CC, 427
Pettersson G, 23
Pettersson P, 23
Pettingell WH, 392, 398
Pevsner J, 516, 524
Peyman A, 47
Pezennec S, 731
Pfaller R, 876, 877, 880–82, 898–900
Pfanner N, 410, 537, 864, 866, 868, 870–74, 878–80, 882, 884, 887, 890, 892, 894, 898, 902, 903
Pfeifer K, 900
Pfister C, 486, 660
Pfuetzner RA, 69, 71
Pfuhl M, 828, 857
Phan H, 701, 707
Phan I, 843, 845
Phelan C, 478
Phelps A, 879
Philipova D, 63, 67, 72, 73, 81, 82, 84, 86
Philipp WJ, 457
Philipson L, 775, 776, 778
Phillips DG, 462, 463
Phillips DR, 131, 141
Phillips MA, 43
Phillips MC, 624, 627, 632
Phillips WJ, 658, 670
Phoenix DA, 214
Phung L, 127
Picat C, 136
Piccirilli JA, 23, 27, 41, 42
Pichoff S, 107, 108
Pickens CE, 616
Picketts DJ, 895
Picking WD, 682, 700
Picone D, 343
Picot D, 555
Piefke J, 686
Pielak CJ, 559
Pieringer RA, 202
Pierpont J, 367–69
Pierschbacher MD, 846, 851, 853
Piet P, 905
Piggot PJ, 109
Pike CJ, 390, 391
Pilato RS, 235, 236, 240, 257
Pillaire MJ, 358
Pilon M, 900
Pimpinelli S, 452
Pines O, 872
Ping F, 552
Piñol-Roma S, 317, 322
Pinto M, 329, 330
Pinz KG, 426
Piotto ME, 867
Pirrit L, 364, 367
Pirrung MC, 780
Pirtle IL, 177
Pirtle RM, 177
Pishvaee B, 518
Pitard B, 733
Pitcher JA, 481, 482
Pitha J, 627, 629
Pitkeathly M, 559
Pla J, 104
Plantavid M, 489
Plante R, 375
Plasterk RHA, 440, 442, 446, 448, 466
Platt T, 130, 140, 150, 152, 157, 179
Plessmann U, 526
Plet A, 136
Plevani P, 72, 80, 87
Pley HW, 24
Pley U, 513, 517, 519
Plunkett ML, 853, 854
Plutner H, 513, 537
Podar M, 46
Podell E, 24, 40, 44
Podjarny AD, 24
Podust V, 62, 64, 76, 77, 362
Podust VN, 77, 79, 80, 366
Poffenberger KL, 349–51, 375

Pogliano J, 184, 189
Pogliano JS, 212
Pogliano K, 102, 110
Pognonec P, 143
Pokutta S, 829
Polakis P, 655
Polard P, 441, 443
Polekhina G, 643, 645, 648, 653, 656, 683
Polisky B, 32, 49, 186
Pollard TD, 487
Pollock RA, 894, 895
Polosa PL, 421
Polvino-Bodnar M, 354
Polyakov A, 128, 132, 148, 160
Polyani M, 43
Polymeropoulos MH, 778
Pomerantz KB, 633
Pompliano DL, 47, 488
Pon L, 876, 892
Ponder JW, 555, 563
Ponimaskin E, 650
Ponstingl H, 481
Ponting CP, 482, 491, 498
Pontis E, 278
Pontoglio M, 606
Poodry CA, 534
Poole LB, 52
Pope L, 767, 768, 774
Porath J, 766, 768
Porcher C, 136
Pörse BT, 708, 710
Porter SJ, 687
Porter TG, 856
Porteus MH, 763, 774
Portier C, 183, 187
Posner BA, 666–70
Possmayer FE, 737
Postic C, 583, 596
Pot DA, 809
Potter C, 424
Potter H, 388, 394, 395, 397
Potter JER, 619
Potts JR, 843
Poulet S, 457
Poulsen FM, 242, 558
Poulton J, 424
Pouwels A, 295
Powell GL, 215
Powell KL, 355, 362, 364, 365, 368, 370–72
Powell T, 906
Powell W, 138, 157, 162
Power S, 599
Powers T, 685, 690, 694, 708
Poy G, 525, 539
Poyton RO, 430, 869, 897, 906
Pradelles P, 339–41
Prakash L, 73, 74, 80, 141
Prakash S, 73, 74, 80, 141
Prasad K, 521, 522, 537
Pratje E, 901
Pratt JM, 307, 308
Prediger EA, 833–35
Preiss T, 429
Premont RT, 478
Prentice HM, 834
Prescott B, 202
Prescott J, 151
Presta LG, 853
Preston CR, 456
Preston VG, 352, 355, 374
Prevelige PE, 389
Price CW, 109
Price DH, 119, 124, 129, 132, 147–50, 156, 157, 162
Price DJ, 809
Price EM, 485
Price TM, 319
Priess H, 183
Prince JB, 697, 701
Prince RC, 257
Princea HMG, 626
Printz RL, 583, 592, 596
Priola SA, 401, 402, 404
Prip-Buus C, 885, 888, 894, 895
Privalsky ML, 317, 323
Privé GG, 220, 643, 652, 660, 662
Probst I, 584
Proctor M, 828
Prokopishyn NL, 848, 852
Pronin AN, 666, 667
Prosser S, 501
Protacio RU, 130
Proudfoot NJ, 151, 182
Proulx KL, 665
Prudent JR, 24, 50
Prusiner SB, 400, 401
Prusoff WH, 374
Pruss D, 447, 448
Prussak TW, 902
Pryciak PM, 439, 447
Pryer NK, 527
Przybylska M, 770, 777
Ptasienski J, 481
Ptitsyn OB, 557, 558, 561, 574
Pucci P, 340
Puckett JM Jr, 289, 308
Puglielli L, 632
Puglisi JD, 24, 685, 687, 688, 698
Pugsley AP, 221
Pujol A, 596
Pulsifer L, 667
Purdue PE, 869, 871
Purifoy DJM, 355, 362, 364, 365, 367, 368, 370–72
Purohit P, 698
Purton T, 144
Puskin S, 526
Puttick DM, 592
Puzon-McLaughlin W, 848, 852
Py B, 189
Pyle AM, 22, 29, 37, 47, 465
Pyles RB, 373, 374
Pypaert M, 529, 533, 534

Q

Qi C, 491
Qi F, 135, 138
Qiu D, 292
Qu A, 848, 852
Qu XM, 618, 622, 624
Quagliariello C, 418
Quarles RH, 840
Quehenberger O, 618
Querfurht E, 535
Querol A, 880, 904
Quick DP, 583
Quick MW, 652, 653
Quigley GJ, 24
Quilliam LA, 488
Quinlan MP, 371, 372
Quinlan RA, 326
Quinn JP, 355, 359, 364
Quinn PG, 590–92, 594, 815–18
Quinn TW, 419, 420
Quintero FL, 340
Quo R-G, 492, 495, 497
Qureshi AA, 285

R

Raaij MJ, 727
Rabbani E, 175
Rabkin S, 350, 351
Rabkin SD, 351, 357, 372, 376, 377
Radding CM, 440
Radkowski CA, 739
Radu A, 320
Radzicka A, 23
Radziejewska E, 316
Radziszewski N, 731
Raeber AJ, 401
Raes G, 839
Raetz CRH, 201, 203, 204, 216, 224, 499
Raff M, 797
Raghaven NV, 53
Ragsdale SW, 275, 281, 282, 288, 291, 292, 294
Rahmatullah M, 669
Raines RT, 23, 43
Raitsimring AM, 258
Raj S, 489
Rajagopal J, 27
Rajagopalan KV, 234, 236, 237, 240, 242, 247–50, 253, 255, 257
Rajapandi T, 212, 213
Rajewsky MF, 427

Rak KH, 712
Rakhit S, 375
Rall S, 368
Ralston EJ, 457, 458
Ralston M, 458
Ramachandran J, 650, 661
Ramachandran RL, 517
Ramachandran S, 556
Ramage L, 877, 880, 902
Ramakrishnan V, 687
Ramamoorthy R, 126
Ramamurthy V, 136
Ramanarayanan M, 175, 183
Ramayah S, 457
Ramesha CS, 482
Ramsden DA, 448
Ramsperger U, 70, 71, 76, 77
Randaccio L, 270, 308
Randall LL, 212
Randall SK, 873
Randazzo PA, 211
Rando A, 583
Rando RR, 484
Rangarajan PN, 136
Ranheim TS, 835, 836
Ransom SC, 342
Rao BJ, 440
Rao MRS, 62, 64, 67, 80, 81
Rapoport I, 525, 540
Rapoport TA, 872
Rapp G, 41, 643, 655, 662
Rapp LM, 352, 372
Rarick H, 657
Rascle A, 430
Rasenick MM, 671
Rashin AA, 553, 555
Raska I, 417
Rasmussen EB, 136, 140
Rasmussen KM, 641
Rassart E, 447
Rassow J, 537, 864, 872, 876–78, 880, 881, 884–89, 891, 894, 896, 900, 901, 905
Rastogi SR, 617, 624
Rathgeber G, 723
Rathjen FG, 836
Raths S, 542
Rauch J, 211
Ravichandran KS, 481
Raw AS, 655, 660, 662, 669
Ray DS, 62, 64, 66–68, 77, 78, 83
Ray JA, 47
Ray K, 485, 665
Ray MK, 317, 329
RayChaudhuri D, 98, 99
Raymer DM, 584
Raymond CK, 536
Raymond GJ, 397, 401, 402, 404
Razin A, 599–601
Rea TJ, 616, 618, 619, 622
Read LJ, 780
Reading DS, 894, 895
Reagan JW, 629
Reardon JE, 374
Reardon JT, 80
Reason AJ, 317, 321, 325, 326, 329
Rebecchi M, 481
Rebecchi MJ, 481, 483, 490
Rebeck GW, 392, 395
Rechsteiner M, 324
Recht MI, 687, 688, 698
Recny MA, 855
Reddig PJ, 364
Reddy G, 440
Reddy KK, 521, 525
Reddy R, 420
Redelmeier TE, 529, 533–35, 541, 542
Reed J, 387, 728
Reeder RH, 130, 131, 134, 135, 150
Reenan RAG, 427
REES DC, 233–67; 234–37, 240, 242, 248, 249, 253, 259, 263, 265
Reese TS, 796, 803
Reeve JN, 193
Reeves BEA, 626
Reeves R, 447
Register JA, 740
Régnier P, 178, 179, 183, 184, 187, 188
Rehberg EF, 619
Rehfuss RP, 811
Rehm EJ, 833
Rehrauer WM, 440
Reich C, 29
Reichard P, 278
Reid GA, 901
Reid GE, 685
Reid GP, 643, 654, 655, 662
Reid KL, 895
Reid LS, 563
Reid RA, 836
Reidlinger J, 736
Reijo R, 777
Reik W, 447
Reilly D, 401
Reimer G, 417
Reinberg D, 119, 124, 148, 153, 156, 321, 322
Reines D, 120, 121, 123–25, 128–33, 136, 138, 141, 146–49, 157, 160, 162
Reinhart MP, 617, 627, 633
Reinherz EL, 855
Reinstein J, 887
Reisbig RR, 124, 126
Reiser COA, 643, 647, 648, 656, 657, 663
Remmers AE, 672
Renaud M, 191
Renda T, 340
Renganathan M, 725
Renouf S, 813
Rens-Domiano S, 648, 657
Rensland H, 651, 652, 654, 660
Renz ME, 853
RESHEF L, 581–611; 582, 584, 587, 588, 591, 592, 594, 599–602, 605
Reshetnikova L, 643, 648, 656, 663, 683
Resnekov O, 129
Retey J, 271, 275, 296, 300, 302, 308
Retondo MJ, 355, 364, 367, 368, 370
Reue K, 622
Reuven NB, 184
Rever BM, 237
Revzin A, 62, 65, 69
Reyes I, 458
Reymond P, 583
Reynafarje BD, 729
Reynolds EC, 275
Reynolds K, 273, 275, 297
Reynolds R, 157, 163
Reznikoff WS, 445
Rezsöhazy R, 448
Rezvani I, 285
Rhee I, 513, 521, 525, 539
Rhee SG, 477–80, 483–91, 494
Rhodes D, 24
Rhodes K, 447
Rhodes S, 664
Riabowol KT, 809
Rialdi G, 30
Riccardo G, 185
Rice GA, 120, 122, 157, 161
Rice M, 221
Rice P, 441
Rice PA, 448
Rich A, 24, 641
Richard FM, 556, 562
Richard JP, 43
Richard P, 733
Richard RB, 708
Richards FF, 461
Richards FM, 551–53, 555, 556, 560, 562–65
Richards JP, 817, 819
Richards SA, 643
Richardson CC, 416
Richardson I, 392
Richardson JA, 417
Richardson JP, 150
Richardson LV, 150
Richardson M, 758, 760, 762
Richaud F, 458
Richman R, 85
Richmond TJ, 560

Richter C, 426
Richter H, 843
Richter K, 339, 341
Richter ML, 722
Rider JE, 488
Ridgway ND, 618, 632
Riedl B, 556
Riens S, 701
Rietveld AG, 217, 218, 220, 221, 224–26
Rieu P, 848, 851
Rieutort M, 599
Riezman H, 536, 542, 543, 870
Rigaud JL, 733
Rigaud M, 500
Rigby PW, 767, 769
Rigotti A, 632
Rilfors L, 203, 222–25
Rimsky S, 154
Rinckel LA, 451
Rine J, 451, 453
Ring BZ, 128, 142, 153, 157
Ringe D, 646, 647, 653
Ringwald M, 831
Rini JM, 825, 829, 831, 832
Rinke-Appel J, 699
Rinkevich B, 828
Rio DC, 442, 456
Ripoll DR, 22
Ritchie DA, 355
Ritchie K, 787
Ritzel RG, 880, 898
Rivellini F, 179
Rivier J, 811, 812, 815
Riviere M, 491
Rivolta MN, 767, 769
Rixon FJ, 352
Rizkallah PJ, 374
Rizo J, 482
Roach PJ, 316, 811
Roane PR, 350
Robberson DL, 81
Robbins DJ, 316
Robbins TP, 456
Robenek H, 533, 538
Roberge M, 130
Roberti M, 421
Roberts CW, 157
Roberts DB, 237, 442, 443
Roberts DL, 282
Roberts JD, 77, 122, 128
Roberts JM, 62, 85
Roberts JW, 119, 124, 128, 141, 142, 153, 157
Roberts K, 797
Roberts MF, 480, 500
Roberts S, 144
Roberts SA, 257, 258
Robertson JM, 682, 683, 701, 704
Robertus JD, 24
Robin D, 589, 591
Robin P, 589, 591
Robinson CV, 558
Robinson HL, 447
Robinson JA, 273, 275, 297
Robinson MS, 513, 515, 516, 520, 521, 523–25, 529, 532, 535, 536
Robinson PJ, 513, 534
Robinson RC, 851, 852
Robinson WG, 301
Robishaw EE, 365
Robishaw JD, 485, 658, 665, 666, 669
Rocchi M, 421
Rochaix JD, 872
Rock CO, 201, 203, 204, 225
Rodbell M, 659
Rode CK, 466
Rödel G, 899, 904
Roder H, 558, 559, 561
Rodermel SR, 457
Rodesch CK, 439, 452
Rodgers DW, 855, 856
Roditi I, 461
Rodnina MV, 682–84
Rodriguez A, 617
Rodriguez IR, 767, 769
Rodriguez-Boulan E, 535
Rodriguez-Fonseca C, 701
Rodríguez-Rodríguz L, 77
Roe BA, 24
Roeder RG, 124, 143, 152, 156
Roesler WJ, 586–88, 590–93, 602
Rogers E, 221
Rogers M, 449
Rogers S, 324, 392, 398
Roghmann MC, 451
Rognstad R, 582, 583
Rohde W, 456
Rohdewohld H, 447
Roher AE, 399
Rohrwild M, 778
Rohwer RG, 763, 766, 768, 774, 776
Roise D, 866–68, 872, 873
Roitberg A, 567
Roitelman J, 626
Roizman B, 348–55
Rojas AM, 684
Rojo EE, 903
Rojo F, 143
Rojo M, 892
Roller RJ, 350, 354
Rollins R, 895
Rollins RA, 895
Roman D, 902
Romani L, 603
Romano LJ, 416
Romano N, 330
Romäo MJ, 234, 237, 240, 247, 249
Romberg L, 803
Romero DP, 711
Rommens CM, 443, 457
Roninson IB, 771
Rooman MJ, 568, 569
Roome JM, 68
Roos MD, 329, 330
Roote J, 455, 456, 466, 467
Ropp PA, 424, 430
Roquemore EP, 316–18, 324–26, 329
Ros M, 582, 585
Rosales R, 149
Rosbash M, 758, 760, 762
Rösch P, 643, 655
Rose AM, 871
Rose GD, 569
Rose KM, 191, 491–93, 498
Rose MD, 536
Roseboom PH, 875
Roseman RR, 439, 452
Rosen A, 478
Rosen BP, 225
Rosen CA, 143
Rosen G, 728
Rosen KV, 712
Rosenbauer H, 124
Rosenberg AH, 744
Rosenberg LE, 275, 866, 892–94, 896
Rosenberg M, 181, 182, 770, 777
Rosenblatt DS, 285
Rosenbusch JP, 217
Rosendahl G, 708
Rosengren AM, 374
Rosenthal JJ, 224
Rosenthal W, 671
Rosenwald AG, 494
Rosenzweig B, 446
Rosing J, 721, 737
Roskoski R, 338
Rosner BM, 241
Rosoff WJ, 627
Rospert S, 864, 879, 894–96, 901
Ross AC, 615
Ross AH, 486, 492, 495, 497
Ross EM, 486, 487, 651, 658, 664, 671, 672
Ross IL, 146
Rossi M, 270
Rossier J, 341, 343
Rossky PJ, 554
Rossman MG, 852
Rostagno A, 843, 845
Roth JR, 454, 465
Roth MG, 501, 533, 539
Roth TF, 515
Rothblat GH, 615, 617, 624, 627, 632
Rothblatt JA, 618
Rothe M, 146

Rothermel BA, 430
Rothery RA, 241
Rothfield LI, 95, 96, 98, 99, 106–8
Rothlein R, 851
Rothman JE, 494, 501, 513, 518, 520, 533, 535, 537, 538, 646
Rothstein JL, 776
Rothstein R, 72, 80
Rotin D, 488
Rougvie AE, 136, 140
Rousset M, 329, 330
Roux B, 583
Rowe T, 512, 513
Rowley JD, 147
Rowley N, 894, 895
Roy AL, 329
Roy D, 456
Roy R, 144, 156
Roy S, 146
Royer CA, 561
Rubenstein AH, 599
Rubenstein JL, 763, 774
Rubin E, 226
Rubin GM, 455, 456, 466, 467
Rubinfeld B, 655
Rudd MD, 132, 162
Rudel LL, 616
Rudge SA, 481, 483, 491–93, 498
Rudnick G, 342
Ruet A, 149
Ruffner DE, 28
Ruffner KL, 368
Ruiters MH, 896
Rumberg B, 734, 737
Rumenapp U, 490, 495
Rumley MK, 204
Rumsby MG, 499
Rumsby RM, 499
Rumsey SC, 626
Rundlett SE, 367–69
Runswick MF, 721
Runswick MJ, 356, 363, 642, 727, 728
Ruoho AE, 659
Ruoslahti E, 846, 851, 853
Rupp WD, 62, 79, 130
Ruppert JM, 62, 75
Ruppert S, 147
Russell GJ, 832
Russell RJM, 556
Russell SJ, 388, 394, 395
Russell ST, 34
Russo A, 78, 79
Rust L, 79
Rustan AC, 633
Rutishauser U, 824
Ruyechan WT, 361, 370
Ryan KR, 864, 884, 885, 887
Ryan M, 480, 873
Ryan MT, 864, 867, 895
Ryan T, 120
Ryazantsev SN, 686
Rycyna R, 687
Ryffel GU, 758, 760, 762
Ryner LC, 185
Rysavy P, 892, 895
Ryter A, 95, 209
Rytömaa M, 215
Ryu S-E, 852, 855, 856
Ryu S-H, 477–79, 485, 495, 497

S

Saavedra RA, 839
Saavedra-Alanis VM, 892, 895
Sabat M, 308
Sabbert D, 742, 796, 802
Sablin EP, 795
Sabourin DJ, 355
Saccomano NA, 342
Saccone C, 418, 420
Sachs AB, 190
Sachs G, 316
Sacks WR, 355
Sadeghian K, 499
Saedler H, 445, 457, 462, 463
Saffhill R, 427
Sagan S, 339, 340, 341
Sage CR, 99
SAGERSTRÖM CG, 751–83
Sagitov V, 124, 125, 128, 132, 133, 148, 157, 160, 162
Sagne C, 884
Saha D, 329
Sahl HG, 339
Sahoo T, 145
Saier MH Jr, 220
Saijo M, 75, 76, 80
Saika K, 720, 722
Saint Girons I, 275
Saison-Behmoaras TS, 77
Saito A, 525
Saito H, 776, 777
Saito M, 491, 492
Sakaguchi M, 869, 873, 875, 899
Sakai J, 440, 442, 445, 446, 449, 454, 455, 458, 460, 626
Sakai M, 617, 624, 632
Sakamoto Y, 617, 632
Sakasegawa Y, 873, 875
Sakata N, 616
Sakati WR, 895
Sakiyama F, 341
Sakurai T, 559
Salamero J, 535
Salas M, 143, 364, 368, 421
Salemme FR, 565
Sali A, 551
Salier A, 400
Salim K, 481, 535
Salmond GPC, 106
Salo P, 777
Salter AM, 626
Samaha RR, 703, 704, 708, 711
Sambasivarao D, 241
Samkurashvili I, 129
Samson L, 62, 73, 86
Sanan DA, 388, 394, 395, 529, 530
Sancar A, 74, 75, 79, 80, 85, 86, 130, 141
Sancar GB, 130
Sanchez G, 24
Sanchez JP, 62, 67, 68, 78, 83, 84
Sanchez M, 104
Sande ER, 621, 622
Sander C, 104, 539, 563–65, 568, 572, 655, 827, 828
Sanders DA, 99, 640, 650
Sanders M, 175
Sanders ME, 853, 854
Sanders S, 139
Sanderson MR, 41
Sandmeyer S, 438, 445, 466
Sandmeyer SB, 450, 451
Sando N, 425
Sands J, 20, 22
Sands RH, 276, 278, 288, 290
Sandstrom WA, 12
Sanford JC, 428
Sankaran K, 204
SantaLucia J Jr, 24
Santer M, 709
Santer U, 709
Santer UV, 709
Santi DV, 32
Santini F, 541, 542
Santocanale C, 80
Santos MJ, 632
Santucci S, 74
Sanyal A, 869
Sarah CJ, 869
Saraste M, 356, 363, 449, 481, 642, 721
Sargent TD, 776
Sargiacomo M, 659
Saridakis E, 389
Sarisky RT, 352
SARKAR N, 173–97; 175–77, 179, 181, 183–86, 188, 189
Sarnovsky R, 449
Sarria AJ, 633
Sasaki H, 770, 771
Sasaki K, 24, 584, 585, 593, 594
Sasaki T, 495, 497
Sasayama T, 730, 731
Sass P, 464
Sassaman DM, 462
Sassanfar M, 32
Sasse D, 584
Sassone-Corsi P, 809, 811, 813, 816
Sastre M, 226

Sasvari-Szekely M, 176, 185
Sato M, 722, 723
Sato R, 899
Sato S, 275, 316
Sato T, 24
Satoh MS, 427
Satoh T, 241, 648
Sauer HE, 723
Sauer RT, 556, 558, 562, 574, 685
Saulino AM, 463
Saunders AM, 394
Saunders WH Jr, 301
Saurin W, 901
Savage HFG, 307
Savakis C, 455
Saveant J-M, 276, 278, 288
Savilahti H, 448
Savon SP, 597, 598
Savva R, 373
Sawada K, 341, 722, 723
Sawishi Y, 843
Sawtell NM, 374
Sayner RM, 499
Sayre MH, 148
Sazuka T, 275
Sbisá E, 418, 420
Scaife R, 488
Scallen TJ, 633
Scarmato P, 518
Scarpulla RC, 430, 900
Scazzochio C, 47
Schaap D, 500
Schaber MD, 488, 659
Schacher S, 833
Schachner M, 836
Schacke H, 828
Schaechter M, 97
Schaefer IM, 588, 589, 592, 601
Schaeffer AK, 364, 369
Schäfer A, 237
Schafer DA, 163
Schafer E, 880
Schäfer H-J, 723
Schäfer MA, 708
Schäfer R, 183, 326
Schaffer JE, 349, 352
Schaffer PA, 349, 352–55, 357, 367, 368, 370, 372
Schaffer SA, 621
Schaffner T, 615
Schalk I, 670
Schaniel A, 877, 878, 882
Scharf M, 572
Schatten R, 353
Schatz DG, 770, 777
Schatz G, 212, 214, 410, 412, 864, 866, 868, 869, 872, 873, 875–78, 880, 882, 891, 901, 905
Schatz M, 688, 690, 692
Scheer A, 484
Scheer U, 417
Scheffer P, 697
Scheffler JE, 655
Scheffzek K, 644, 646, 653, 656, 660
Scheidig AJ, 643, 652, 654, 655, 660, 662
Scheinman A, 688, 699
Schekman R, 501, 512–14, 527, 532, 873
Schellenberg GD, 386
Scheller RH, 516, 524
Scherdin U, 447
Scherer A, 643, 644, 646, 652, 655, 660
Scherer H, 836
Scherer PE, 659, 885, 886, 888, 894–96, 901
Scherubl H, 671
Schevitz RW, 24, 555
Schiau I, 275
Schibler U, 317, 321
Schieffer B, 489
Schieffer E, 489
Schierle CF, 193
Schiffer CA, 563, 568
Schildkraut C, 754
Schildkraut CL, 754
Schiltz E, 643, 655
SCHINDELIN H, 233–67; 234, 236, 237, 240, 242, 247–49, 253
Schindler H, 525
Schindler M, 317, 318, 321
Schindler T, 558
Schink B, 241
Schirmer NK, 643, 647, 648, 656, 657, 663
Schissel SL, 623, 632
Schlame M, 215, 216
Schlegel J, 902
Schlegel RA, 317, 322
Schlegel U, 65, 66, 68, 77, 79, 81, 82, 84
Schlenstedt G, 646, 655
Schlessinger D, 680
Schlessinger J, 211, 479, 481, 483, 488
Schleyer M, 889
Schlichter JB, 900
Schlichting I, 41, 643, 651, 652, 654, 655, 660, 662
Schlossman DM, 537, 538
Schlossmann J, 877, 878, 880, 881, 898
Schlunzen F, 686
Schmalle H, 237
Schmechel DE, 394
Schmid FX, 558, 561, 896
Schmid K, 894, 896
Schmid RD, 226
SCHMID SL, 511–48; 513, 518, 520, 527–30, 532–35, 537, 538, 541, 542
Schmid SR, 49
Schmid W, 606, 815, 819
Schmidt B, 525, 539, 904
Schmidt CJ, 653, 665, 666, 669
Schmidt DE, 30
Schmidt EDL, 593
Schmidt FJ, 126
Schmidt G, 654
Schmidt H, 584
Schmidt M, 490, 495
Schmidt S, 905
Schmitt ME, 416, 417, 420, 890, 894, 895
Schmitt MK, 323
Schmitz B, 317, 324, 325
Schmitz UK, 869, 892, 895
Schnabel P, 480, 484, 486
Schnaitman CA, 217
Schnapp A, 124
Schnapp BJ, 803
Schnapp G, 124, 132, 151
Schneider A, 864, 888, 901, 905
Schneider C, 62, 63, 68, 74, 78, 775, 776, 778
Schneider DL, 629
Schneider F, 234, 237, 242, 247, 249, 253
Schneider G, 256, 870
Schneider H, 877, 878, 880, 879, 892, 895, 898
Schneider H-C, 885, 888–91, 894
Schneider R, 572
Schneider U, 338
Schneiter R, 864
Schnell N, 338
Schnetz K, 139
Schneuner D, 387
Schneuwly S, 478, 490
Schnipper LE, 368
Schnizer RA, 739
Schobert CT, 879
Schoelen SL, 584
Scholten JD, 276, 278, 283, 288
Scholts MJC, 740
Schoolwerth AC, 593
Schrauber H, 566, 567
Schrauzer GN, 278, 279, 281
Schreek S, 818
Schreiber SL, 670
Schreiner R, 633
Schricker R, 902
Schroder CH, 353
Schröder S, 522, 526
Schroder SH, 353
Schroeder CC, 534
Schroeder F, 633
Schroeder H, 895
Schroeder R, 28

Schueler D, 701, 709
Schuh R, 831
Schuler D, 692
Schulte U, 892
Schultz BE, 249, 257
Schultz GA, 175, 671
Schultz MC, 131
Schultz PA, 616, 618, 619, 622
Schultz PG, 24, 49, 50, 660
Schulz GE, 242, 555
Schulze H, 705, 711
Schulze M, 904
Schumann R, 643, 652, 655, 660
Schurmann A, 494
Schurr TG, 429
Schuske K, 531
Schuster G, 182, 192, 193
Schuster SC, 796, 798
Schuster SM, 739
Schutz G, 606, 758
Schwaiger M, 889, 892
Schwartz DC, 461
Schwartz J, 211
Schwarz D, 226
Schwarz E, 871, 885, 888, 894, 895, 897, 901
Schwarz O, 737
Schwarz RT, 317, 327
Schwarz TL, 531
Schwarzbauer JE, 843, 847
Schwarz-Sommer Z, 456, 462, 463
Schwedes JF, 358, 359
Schweingruber AM, 477, 478
Schweingruber ME, 477, 478
Schweins T, 660, 661
Schweyen RJ, 464
Scicchitano DA, 131, 141
Sciorra VA, 500
Scoble HA, 583
Scoble J, 684
Scolnick EM, 659
Scott AF, 456, 462, 463
Scott DK, 587, 591
Scott GL, 398
Scott JR, 441
Scott K, 490, 491
Scott MJ, 257, 401
Scott MR, 767, 769
Scott R, 66
Scott RA, 572, 573
Scott WG, 24
Scotto L, 525, 539, 541
Scraba DG, 351
Screpanti I, 603
Scribner WM, 498
Scrimgeour KG, 278
Scullard GH, 584
Seals JR, 324
Seaman MNJ, 529, 532, 536
Sears AE, 348, 354
Seascholtz A, 808
Seaton BA, 482
Sebald W, 740
Sedelnikova SE, 687
Seed B, 763, 766, 768, 774, 776, 851, 854
Seedorf K, 488
Seelig J, 216, 391, 392
Seethaler G, 341
Seetharam R, 896
Segal-Bendirdjian E, 463
Segawa S, 555
Segui B, 877, 879
Seibl J, 290
Seiler-Tuyns A, 136
Seitz SP, 480
Sekeris CE, 585
Seki N, 877, 878
Seki T, 418
Sekiguchi M, 209
Sekimizu K, 149, 209, 211
Sekimizu S, 211
Sekino N, 739
Sekiya S, 767, 769, 774
Sekiya T, 418
Selinger Z, 661
Selkoe D, 386, 387, 392
Sellem CH, 464
Sellers JR, 791, 795, 803
Selvaraj P, 853, 854
Semenkov YP, 683, 690, 697
Sen GC, 606
Senese RA, 364, 365
Senior A, 317, 318, 321, 325, 330
Senior AE, 721, 724, 729, 732, 737–39, 800
Sentenac A, 134
Sentry JW, 455, 466
Seo JK, 485
Seo Y-S, 77
Seow H-F, 518
Sequi-Real B, 864, 876, 891
Ser KL, 364, 365
Serafini T, 513
Séraphin B, 417, 420
Seroussi E, 63, 69
Seroz T, 156
Serror P, 185
Serunian LA, 480
Setlow B, 110
Setlow P, 109, 110
Seto E, 62, 73, 86, 87
Seto-Young D, 217
Setzer DR, 124, 130
Setzer J, 155
Seubert P, 387
Seutin G, 423
Sevarino KA, 808, 809
Séve A-P, 316
Severini A, 350, 351
Severini C, 339–41
Severinov K, 143, 157, 160
Severinova E, 143
Sewry C, 424
Sha Y, 137, 152
SHADEL GS, 409–35; 414, 423
Shah J, 728
Shah S, 481, 483
Shakhnovich EI, 558
Shamoo Y, 83
Shan S, 33, 34
Shang J, 151
Shanks J, 789
Shankweiler G, 688, 699
Shanti M, 588, 592, 601
Shao L, 352, 356, 372
Shao X, 482
Shapiro AS, 741
Shapiro JA, 441, 452, 458
Shapiro L, 102, 829–33, 840, 842, 843
Shapkina TG, 699, 700
Shark K, 428
Sharkey SM, 426
Sharon R, 686
Sharp LL, 799
Sharp PA, 24, 143, 152
Shatsky I, 700
Shaver PR, 352
Shaw GJ, 338, 342, 481, 482, 535
Shaw K, 486
Shaw P, 317, 323
Shaw R, 481
Shaw S, 853, 854
Shaw SK, 832
Shea MH, 583
Sheaff R, 369
Shears SB, 526
Shechter I, 622
Shedden WI, 364
Sheen FM, 462
Sheets MD, 190
SHEETZ MP, 785–805; 163, 787, 794, 795, 802, 803
Sheff D, 512
Sheffield WP, 873
Shekel JM, 727
Sheldon M, 80
Shen C-c, 427
Shen CL, 398, 399
Shen GP, 895
Shen H, 207
Shen JJ, 155
Shen LX, 24
Shen S-H, 500
Shen WC, 871
Shen ZH, 710
Sheng M, 810, 811, 815
Shenkin PS, 569
Shenolikar S, 812
Shepard JS, 513
Shepherd N, 456
Shepherd M, 853

Sherman F, 559, 899, 900
Sherman G, 352, 363, 364
Sherman S, 843
Shermoen AW, 121
Sherratt D, 443, 444, 449
Sheu SY, 552
Shi JR, 478
Shi L, 895
Shi YB, 131, 141
Shibasaki F, 489
Shibutani S, 426
Shibuya I, 201, 203, 205, 208, 216
Shiekhattar R, 80
Shields D, 535
Shigenaga MK, 207, 426
Shigesada K, 180, 743, 744
Shigeto Y, 463
Shih C-C, 447
Shih HM, 814
Shih JP, 552
Shih W, 516, 520
Shikata Y, 342
Shilatifard A, 147
Shilling J, 885, 887, 888, 894
Shimizu A, 767, 769
Shimizu H, 279
Shimokata K, 895
Shimonishi Y, 340
Shimooku K, 497
Shimuzu Y, 64, 68
Shin K, 739
Shin SH, 477, 479, 485, 487, 489
Shin Y, 722, 723
Shinitzky M, 500
Shinkai A, 213
Shio A, 615
Shipley GG, 224, 614
Shipman M, 536
Shiratori A, 63, 67
Shiratori T, 614, 617
Shiratori Y, 617, 630
Shiratsuchi A, 316
Shire D, 134
Shire JGM, 622
Shirokov V, 686
Shishido E, 478
Shivji MKK, 80
Shlomai J, 351, 352
Shoelson SE, 481, 487
Shoenfeld Y, 211
Shoffner JM, 426
Shoichet BK, 554
Shoji-Kawaguchi M, 211
Shopsin B, 535
Shor J, 136
Shore GC, 864, 868–70, 873, 877, 878, 898, 899
Short H, 583
Short HP, 584, 592, 808
Short J, 583
Short JM, 592, 594, 599, 808
Short MK, 588, 589, 592, 601
Shortridge RD, 478, 490
Shoshani T, 587
Shouval D, 599, 600
Shpanchenko O, 695
Shpetner HS, 534
Shrewsbury MA, 624
Shtrom SS, 371
Shu G, 374
Shub DA, 47
Shukla SD, 489
Shuman S, 120, 124, 132, 143, 144
Shyjan AW, 430
Sichler C, 322
Siddiqi AR, 492, 495, 497
Siddiqui RA, 476
Sidiropoulos D, 484
Siede W, 373
Siegel MI, 492, 499
Sigal IS, 659
Sigler PB, 24, 41, 479, 481, 483, 555, 643, 644, 648, 650, 656, 657, 660, 661, 666, 667, 669, 672, 896
Sigman DS, 737
Signon L, 452
Sikela J, 813
Silbert DF, 479
Silman I, 22
Silva MD, 872
Silveira LA, 514
Silver PA, 319
Silverstein SC, 386
Silvius JR, 870, 898
Sim SS, 487
Simancek P, 79
Simionescu N, 615
Simmaco M, 339–41
Simmons A, 351
Simmons DL, 851
Simoes AP, 480
Simon EJ, 387, 389, 396, 404
Simon H, 259
Simon I, 625, 633, 651, 654
Simon J-P, 535
Simon MC, 147, 484
Simon MI, 481, 484–86, 648, 651–53, 658, 662, 665–67
Simon SM, 890
Simonds WF, 667
Simoni RD, 626, 627, 632, 727, 799
Simons K, 633
Simons SL, 32
Simonsson S, 357, 368, 369
Simpson CL, 192
Simpson F, 512, 516
Simpson RJ, 685
Sinclair MH, 368
Sines JJ, 22
Singer AU, 487
Singer MF, 461, 462
SINGER WD, 475–509; 495–97
Singh B, 895
Singh G, 426, 429, 430
Singh KK, 62, 73, 86, 879
Singh UC, 553, 572
Siok CJ, 341–43
Siomi MC, 317, 322
Sippel AE, 183, 185
Siriramarao P, 847
Sirovatka JU, 308
Sirrenberg C, 885, 888
Sirum-Connolly K, 707
Siu C-H, 839
Sivan S, 453
Sivaprasadarao A, 478, 485
SIVE HL, 751–83; 763, 765, 766, 768, 774
Sjöling S, 892, 895
Sjollema K, 896
Sjölund M, 223
Skaliter R, 351, 372, 376, 377
Skalka AM, 448, 467
Skarnes WC, 136, 144
Skarstad K, 209
Skaugen M, 339
Skehel JM, 727, 728
Skelly PJ, 464
Skiba NP, 486, 657, 658, 664, 667, 672
Skingle DC, 766, 768
Skinner RH, 663, 664
Skoglund U, 691
Skogman E, 136, 146
Skolnick J, 569, 572
Skowronski J, 776
Skripkin E, 700
Skurat AV, 316
Sladek FM, 587, 591
Sladek T, 669
Sladicka MM, 317, 322
Slater M, 97
Slater SJ, 226
Slaughter C, 491, 493, 494, 496, 501, 646
Slepak VZ, 652, 653
Slepnev VI, 535
Sletten K, 339
Sligar SG, 555
Sliskovic DR, 616, 617
Slominski E, 322
Slonimski PP, 464, 871, 900
Slot F, 462
Slotte JP, 630
Sluder AE, 124, 148
Slupphaug G, 871
Slusher LB, 871
Slyvestre M, 619
Smagula CS, 417, 868
Small DM, 614
Small SJ, 834

Smalle J, 462
Smart EJ, 632
Smart WC, 62, 73, 86
Smeal T, 817, 818
Smigel MD, 650, 651, 658
Smith AJ, 316, 317, 324
Smith BJ, 874
Smith BO, 843
Smith CL, 461
Smith DB, 457
Smith DJ, 721
Smith DM, 317, 322, 455
Smith DR, 275
Smith ERB, 7
Smith GA, 271, 296, 300
Smith GCM, 80, 85
Smith GR, 182
Smith J, 72, 80
Smith JA, 484
Smith JB, 728
Smith JL, 492, 495–97, 616
Smith JW, 846
Smith M, 255, 320, 899
Smith MB, 735, 738
Smith MR, 480
Smith PD, 530
Smith TF, 666, 669
Smith V, 451, 465
Smitherman PK, 499
Smrcka AV, 484–86, 651, 665, 666, 669
Smyth RD, 272
Smythe E, 528–30, 532, 533, 542
Sneden D, 24
Snel MM, 214, 900
Snell EE, 32
Snow AD, 392
Snow CM, 317, 318, 321, 325, 330
Snow DM, 316, 318, 330, 331
Snow ME, 563
Snow PM, 838
Snyder RO, 62, 68, 69, 73
Snyder SW, 390, 391, 396, 398, 399, 402, 404
Soares MB, 771
Sobeski JK, 275, 281
Socolich M, 207, 490, 491
Söderbom F, 186
Soderling SH, 811
Soderling TR, 811
Söderlund H, 766, 768
Soga M, 739
Sohmen R, 650, 651, 654
Sokolov M, 722
Solaini G, 739
Solari R, 644, 646, 647, 653
Solas D, 780
Soll D, 24
Söllner T, 864, 872, 876, 877, 879–82, 898
Sollner-Webb B, 121
Solomon B, 393
Solomonson LP, 256
Solow-Cordero DE, 121, 132, 161
Solter D, 776
Solus JF, 428
Soma T, 64, 68
Somerville CR, 202, 205
Sommer H, 457
Somoza C, 856
Sondek J, 660, 661, 666, 667, 672
Sonderegger P, 836
Song J, 498
Song JP, 664
Song KS, 633
Song S, 593
Song X, 387
Songyang Z, 525, 540
Soni A, 420
Sonnhammer D, 574
Sopta M, 148
Soreghan B, 387, 390, 391, 398
Sorimachi H, 478
Sorkin A, 525, 539, 541, 542
Sorkina T, 525, 539, 541
Soroka V, 834, 835
Sorokin AV, 185
Sosa MA, 525, 539
Sosenko IR, 599
Sosinsky GE, 796
Sosnick TR, 558, 574
Soteropoulos P, 740
Soufflet E, 600
Souid AK, 737
Soulard M, 317, 322
Souter E, 534
Southerland WM, 255, 257
Sovik O, 599
Sowerby PJ, 536
Soyal SM, 139
Soyez D, 341, 343
Spaan WJ, 136, 144
Spada A, 650, 659, 661
Spadoro A, 349, 352
Spady DK, 633
Spaete RR, 353
Spahn CMT, 708
Spalholz B, 766
Sparkowski J, 149
Sparks AB, 488
Spector AA, 616, 617, 625, 633
Spector S, 559
Spector T, 374, 375
Spelsberg TC, 143
Spence MW, 617, 624, 629
Spencer CA, 125, 151
Spencer SA, 851
Spicher K, 650
Spiegelman BM, 587, 589, 590
Spielmann A, 457
Spies A, 740
Spilburg CA, 617, 619
Spillane DM, 629, 631
Spillantini MG, 325
Spindler SR, 121
Spirin AS, 686, 700
Spiro TG, 292, 308
Spoto G, 316
Spradling AC, 439, 452, 455, 456, 466, 467
Sprague GF, 542
SPRANG SR, 639–78; 482, 643, 649, 650, 655–58, 660, 662, 664, 665, 669
Spring DJ, 667
Springer T, 848, 852
Springer TA, 846, 847, 853–56, 858
Sprinkle JR, 900
Sprinzl M, 643, 647, 648, 651, 654, 656, 657, 663
Spudich JA, 787, 795, 803
Squinto SR, 812
Squires C, 137, 152
Squires CL, 137, 152
Sreenivasan U, 553
Srinivasan PR, 175, 183
Srinivasan R, 569
Srivastava S, 688, 689
Stabell EC, 356, 358
Stacey DW, 500
Stack JH, 525, 536
Stade K, 701, 711
Stadtman TC, 242, 272
Staempfli S, 707
Stahl FW, 375, 377, 378, 754
Stahl MM, 375, 377, 378
Stahl N, 33
Stahl PD, 532
St. Clair RW, 615
St. John T, 766, 768
St. John TP, 778
Stamminger T, 814
Stamnes MA, 535
Standart N, 190
Stange EF, 615, 617, 624, 626, 633
Stangel M, 539
Staniszewski C, 668, 671
Stanley SL, 317, 327
Stanton P, 606
Stark H, 688, 690, 692
Starr CM, 317, 320
Stassen APM, 71
Staugaitis SM, 840
Staunton DE, 853
Stebbins CE, 148
Steck TL, 617, 626, 627, 630, 632, 633
Steege DA, 131
Steen HB, 209
Steenaart NAE, 864, 870, 898, 899
Steffen DL, 447
Steffen MC, 871

Steger HF, 876, 877, 879, 879, 882, 900
Stegmann B, 353
Stehle T, 851, 852
Steiger RH, 326
Stein A, 30
Stein I, 872
Stein O, 632
Stein Y, 632
Steinber D, 618
Steiner B, 325
Steiner G, 701
Steiner H, 883, 891, 899–901
Steinert K, 743
Steinmetz M, 766
Steitz JA, 27, 29, 151, 181
Steitz TA, 27, 29, 41, 83, 448, 648, 652, 683
Stellwagen A, 460
Stempel KE, 733
Stenlund A, 358
Stepp JD, 516, 524
Stern DB, 192
Stern DM, 455, 456, 466, 467
Stern S, 690, 692, 696, 698
Sternberg MJ, 554
Sterne-Marr R, 320
Sterner DE, 156
Sternglanz R, 131
Sternlicht H, 99
STERNWEIS PC, 475–509; 484–86, 491, 493–99, 501, 646, 651, 658, 660, 665, 666, 668, 728
Stevanovic S, 339
Stevens JT, 366–68
Stevens RV, 270
Stevens TH, 536
Stevenson BJ, 536
Stevnsner T, 427
Stewart G, 109
Stewart J, 127, 513, 521, 525, 539
Stiefel EI, 234–37, 240, 242, 246, 257, 262
Stiege W, 692
Stigger E, 63, 65, 68, 72, 75, 76, 79, 81, 83, 84
Stillman B, 62, 63, 65, 66, 68, 73, 77–79, 84, 85, 414, 421, 425
Stimson ER, 392, 395, 398
Stindl A, 338, 343
Stine WB, 399, 402, 404
Stirpe F, 250
Stitt BL, 124
Stock JB, 484, 517, 518, 667
Stockel J, 401
Stöckl A, 215, 216
Stoffel M, 596
Stöffler G, 688, 692, 705, 711, 712
Stöffler-Meilicke M, 688, 692, 705, 711
Stohl LL, 414
Stoorvogel W, 512
Storm DR, 811
Stoudt G, 617
Stouten PFW, 655
Stow EC, 371
Stow ND, 349, 351, 353–57, 363–65, 367–69, 371
Stoye JP, 440, 442, 443, 445, 447, 450, 455, 460, 461, 463, 466
Strack B, 62, 64, 76, 77, 362
Strader CD, 671
Straffon AF, 904
Stragier P, 110
Strathern JN, 451, 463
Strathmann MP, 648, 666
Stratowa C, 851
Straus D, 770, 771, 774, 777
Strebel F, 617, 624, 626, 627
Streicher B, 28
Strickland DK, 845
Strittmatter WJ, 394, 395
Strobel G, 902
Strobel SA, 22, 27, 37, 47, 48, 212
Strobl W, 139
Stromstedt PE, 590, 591, 594
Stroop SD, 734
Strotmann H, 737
Stroud RM, 563, 568
Struhl K, 130, 154
Strum JC, 492, 499, 500
Stryer L, 780
Stuart AC, 142
Stuart DI, 851, 852, 854–57
Stuart RA, 864, 869, 879, 889, 891, 894, 895, 897, 899, 901, 903–6
Stubbe J, 273, 274, 296, 301
Stubbs CD, 226
Studier FW, 181, 744
Studitsky VM, 130
Studwell-Vaughn PS, 366
Stukenberg PT, 366
Stulke J, 139
Stupperich E, 270, 275, 286, 291, 294, 307
Stura E, 670
Sturley SL, 618, 619
Sturzenegger B, 77
Stutchfield J, 501
Su EP, 111
Su L, 771
Su XL, 478
Subak-Sharpe H, 364
Subak-Sharpe JH, 355, 368
SUBBIAH S, 549–79; 563, 568, 572, 573
Subler MA, 356
Subramanian AR, 190, 680
Subramanian D, 371
Subramanya HS, 744
Such P, 271, 296, 300
Suck D, 41
Suckling KE, 615, 617, 623, 624, 626, 633
Suda K, 866, 873, 875, 877, 878, 880, 882, 884, 892, 895
Suddath FL, 24
Südhof TC, 482, 521, 526, 528, 530, 534
Sugai S, 558, 561
Sugaya R, 478
Sugi Y, 834
Sugimoto N, 36, 47
Sugimura T, 770, 771
Sugino A, 77
Suginohara Y, 617, 632
Sugiyama S, 426, 796
Suh ER, 47
Suh HW, 478
Suh P-G, 477–79, 485
Sullenger BA, 20
Sullivan EJ, 780
Sullivan KA, 655, 658, 669
Sullivan M, 618, 619, 622, 634
Sulo P, 879
Sultzman LA, 482
Sumimoto H, 143
Summers J, 136, 144
Summers MF, 270, 308
Summers NL, 563
Summers WC, 374
Summers WP, 374
Sumrada RA, 62, 73, 86
SUN BI, 751–83
Sun D, 109
Sun F, 596, 828
Sun I, 85
Sun JH, 151, 219
Sun PD, 242
Sun PQ, 811
Sun S-J, 571
Sun S-Z, 280
Sun YM, 490, 491
Sunahara RK, 648, 658, 671
Sundaresan V, 457
Sunde RA, 257
Sung P, 73, 74, 80, 81, 141
Sung T-C, 492, 493, 498
Sung WK, 480
Sung Y-J, 655
Sunstrom NA, 144
Sure V, 134
Surguchov A, 139
Surratt CK, 131, 132
Surridge CD, 99
Sussman JL, 22, 24
Sutcliffe JG, 771
Sutherland C, 595
Sutton RB, 482
Suwa Y, 386, 390, 393
Suwanichkul A, 586, 590, 595

Suzuki E, 24
Suzuki H, 157
Suzuki K, 215, 629
Suzuki M, 77, 211
Suzuki N, 387, 396
Suzuki T, 485, 574
Sved J, 442, 456
Svejstrup JQ, 156
Svensson LA, 687
Svoboda K, 787
Swairjo MA, 482
Swanson ST, 867
Swaroop A, 766, 768
Swaroop M, 895
Sweet RM, 583, 584
Sweet RW, 855, 856
Sweitzer TD, 206
Swigart P, 490, 501
Swihart BM, 364, 365
Swinburne J, 275
Switzer RL, 138
Sylvers LA, 697
Symons M, 492, 495, 497
Symons RH, 701, 766, 768
Synouri-Yrettakou S, 626
Syroeshkin AV, 734
Syroid DE, 130
Syvänen AC, 766, 768
Szent-Gyorgyi AG, 803
Szewczak AA, 687
Szostak JW, 22, 24, 27, 29, 32, 45, 47, 49, 51
Szyf M, 599–601

T

Tabak HF, 86
Tabares E, 349
Tabas I, 615, 617, 623, 626, 627, 630, 632
Tabata S, 185
Taccioli GE, 80, 85
Tacke E, 456
Tacke R, 836
Tackett SL, 278
Taddeo FJ, 226
Tagashira Y, 428
Tago K, 495, 497
Taiara M, 418
Taibi G, 330
Taieb F, 793
Tainer JA, 539, 540
Taiz L, 726
Takada Y, 848, 851, 871
Takagaki Y, 185, 776, 777
Takagi Y, 147
Takahashi A, 770, 771
Takahashi J, 818, 819
Takahashi K, 899
Takahashi N, 211, 560
Takahashi T, 843
Takai Y, 482, 495, 497
Takaichi S, 884
Takanashi T, 854
Takano H, 478
Takao T, 340
Takeda A, 899
Takeda T, 398
Takei K, 534, 535
Takeichi M, 824, 829
Takeishi K, 177
Takemitsu M, 428, 429
Takenawa T, 477, 488, 489
Takeuchi H, 149
Takeya H, 481
Takeyama M, 724
Takeyasu K, 726
Taki T, 219, 491, 499
Taljanidisz J, 176, 185
Tall AR, 615, 626
Tallant TC, 275, 295
Tamanoi F, 416
Tamao Y, 307
Tamiya KK, 211
Tamiya-Koizumi K, 211
Tamkun JW, 154
Tamura H, 211
Tamura Y, 561
Tan EM, 417, 420
Tan L, 330
Tan PK, 542
Tan R, 24
Tan S, 124, 147
Tan SK, 490, 501
Tanaka A, 275
Tanaka I, 687
Tanaka M, 75, 76, 426, 481, 616
Tanaka N, 559
Tanaka T, 603
Tanaka Y, 818
Tanase S, 873, 874
Tancredi T, 343
Tanford C, 802
Tang C-M, 62, 73, 86, 87, 741
Tang G, 142
Tang TH, 457
Tang W-J, 484
Tang X, 499
Tang YQ, 340
Tang Z, 659
Tanguy Le Gac N, 364, 370
Tanimura R, 565–68
Tannen RL, 583, 593
Tanner ME, 342
Tannery NH, 526
Tansey J, 851
Tanzariello F, 418
Tapio S, 691
Tapper DP, 422
Tapprich WE, 709, 710
Tarasow TM, 32
Tarassov I, 864
Tarassov IA, 864
Tarr E, 5
Tartakoff AM, 318, 864
Tarun SZ Jr, 190
Tasashi M, 722
Taschner PE, 95
Tashiro M, 481
Tassan JP, 156
Taubert H, 146
Tauer R, 897
Taussig R, 650, 651, 655, 666, 669
Tavan P, 788
Tavormina PL, 157
Taylor AL, 453
Taylor BH, 697
Taylor DW, 100, 101
Taylor GD, 479
Taylor GL, 556
Taylor ICA, 809
Taylor JM, 671, 672
Taylor JS, 141
Taylor KA, 100, 101, 615
Taylor RT, 278
Taylor SJ, 484, 813
Taylor SS, 812
Taylor WR, 568
Tchenio T, 463
Teahan C, 644, 646, 647, 653
Teal SB, 532
Teather RM, 107
Tedder TF, 853
Tegtmeyer P, 357–59
Teissere M, 491
Telesnitsky AP, 157
Temeles GL, 659
Tempst P, 897
Temussi PA, 343
ten Berge D, 214
Teng SC, 461
Tengelsen LA, 352
Tenhunen J, 766, 768
Tenney DJ, 364, 367, 369
Tennis M, 392
Tensen CP, 341, 343
Tenud L, 290
Teo C-H, 687
Teplow D, 836
Teplow DB, 392, 394, 395, 397, 398, 658, 665
Terada K, 873
Terakita A, 485
Teramoto T, 341, 342
Terao J, 500
Terui T, 211, 494
Terzi E, 391, 392
Tesoriere G, 330
Testet-Lamant V, 500
Tetart F, 97
Thadeio PF, 341, 342

Thauer RK, 275, 289, 291, 294, 295
Theibert AB, 525
Theissen G, 123
Thelander L, 136, 146
Theler L, 375
Theobald J, 530
Theodore TS, 202
Theroux SJ, 543
Thibier C, 793
Thieffry M, 884
Thierry JC, 24
Thiery J-P, 824
Thirman MJ, 147
Thirup S, 564, 641, 643, 645, 648, 653, 656, 663, 683
Thomä NH, 285, 296–98, 300, 301
Thomas BC, 740
Thomas CA, 386
Thomas D, 389, 796, 872
Thomas DC, 539
Thomas DY, 669
Thomas GMH, 490, 494, 501
Thomas MA, 616, 618, 619, 623, 631
Thomas MS, 371
Thomas PD, 571
Thomas TC, 665–67, 669
Thomas WK, 423, 451
Thömmes P, 64, 68, 77
Thompson A, 829, 830, 832, 833
Thompson CB, 136
Thompson CM, 100
Thompson JE, 43, 706
Thompson MA, 810, 811, 815
Thompson PA, 562
Thompson RC, 40, 684
Thompson RL, 373, 374
Thompson-Stewart D, 456
Thomsen NK, 834, 835
Thomson AB, 192
Thomson AJ, 237
Thomson FJ, 501
Thomson JN, 538
Thorgeirsson SS, 604, 606
Thornburg RW, 872
Thorner J, 477, 664
Thornton JM, 553, 554, 563, 566, 568
Thornton K, 867, 868
Thresher R, 65, 68
Thuresson A-C, 185
Thuriaux P, 149
Thurlow DL, 697
Thurmond RL, 216, 222
Thygesen J, 686
Tian G-L, 464
Tian K, 317, 327
Tidor B, 565, 567
Tiesinga JJ, 583, 592, 596
Tihy F, 44
Tilcock CPS, 223
Tilghman SM, 584
Tillier F, 74
Tillman M, 62, 73, 86
Tilly K, 895
Tilton RF Jr, 553
Timasheff SN, 389, 390, 393, 556
Timberlake WE, 766, 769
Timblin C, 774
Timbury MC, 355, 368
Timerman AP, 525
Timko KD, 191
Timko MP, 901
Timm D, 481
Timmer RT, 427
Timms M, 892
Tinhofer I, 489
Tinker RL, 145, 160
Tinoco I, 27
Tinoco I Jr, 24, 687
Tiranti V, 421
Tischenko SV, 686
Tisdale EJ, 534
Tishkov V, 695
Tizard R, 851, 853
Tjernberg LO, 386
Tjian R, 141, 147, 317, 321, 816
Tobin JB, 33
Tocchini-Valentini GP, 128
Todd MJ, 894–96
Todd RJ, 719–21
Toh-e A, 477, 885, 887, 894, 895
Tokino T, 767, 774, 776
Tokuda H, 213
Tokumasu F, 726
Tokunaga F, 559, 560
Tol HV, 28
Tolar LA, 462
Tollervey D, 417, 420
Tolley SP, 242
Tomatis R, 343
Tomich JM, 727
Tominna EF, 846, 847
Tomita JK, 851
Tomiyama T, 386, 390, 393
Tomizaki T, 215
Tomizawa J, 416
Tomkinson AE, 62, 73, 86, 87, 427
Tommassen J, 212, 214, 221, 222
Tomschy A, 833
Tomski SJ, 398
Tonegawa S, 776, 777
Tong KI, 829, 831
Tong L, 643, 645, 646, 652, 653, 655, 660, 662
Tonks NK, 487
Tontonoz P, 587, 589, 590
Tooyama I, 340
Topper JN, 414, 416, 417, 420, 425
Torok Z, 867, 876
Torregrossa MV, 330
Torrekens S, 813
Torres AR, 766, 768
Torres C-R, 317, 318, 323, 325, 331
Torrey TA, 210
Tory K, 147
Toscano PJ, 270
Tosheva R, 329
Tota MR, 671
Totrov M, 556, 562
Totty NF, 478, 490
Tou J-S, 500
Touhara K, 481, 482, 495
Toulme JJ, 74, 77
Touriol C, 107, 108
Tourte M, 421
Tourtellotte WW, 763
Tovell DR, 350, 351
Tower J, 121, 456, 467
Towler PS, 482
Toyoda T, 518
Tozawa K, 739
Tozer RG, 742
Trach K, 902
Trahey M, 663
Trakhanov SD, 686
Traub LM, 522, 523, 532, 535
Traut RR, 701, 705, 711
Trautwein T, 259
Traverse KL, 462
Travis SZ, 766
Traxinger RR, 329, 330
Treisman RH, 317, 321
Trempe MR, 699
Treuner K, 70, 71, 76, 77
Trevisanato S, 707
Trexler M, 845
Trieber CA, 241
Triman K, 706, 707
Tritz R, 22
Troll H, 901
Tropschug M, 868, 871, 889, 892, 894, 896
Trotman CNA, 574
Trotter PJ, 207
Trowbridge IS, 536, 538–40
Trüb T, 481
Trugnan G, 329, 330
Trumpower BL, 904
Truneh A, 855, 856
Trus M, 587, 591, 600, 602, 604, 605
Truscott RJW, 326
TSAI J, 549–79; 552, 554, 572, 573, 874
Tsai L, 275, 296
Tsai M-D, 480, 499
Tsai M-H, 500
Tsai SY, 608
Tsanev R, 130

Tsaneva I, 130
Tseng ZH, 816
Tseu K, 340
Tsien RY, 812
Tsong TY, 557
Tsubokawa M, 650, 661
Tsubouchi A, 30
Tsuchiya T, 218
Tsuji K, 829
Tsukada S, 64, 68, 481
Tsukada T, 808
Tsukagoshi Y, 206
Tsukahara Y, 485
Tsukihara T, 215
Tsukiyama T, 154
Tsurimoto T, 77, 79
Tsuruhara T, 534
Tsurumi T, 363
Tsuruta H, 561, 723
Tu G-F, 685
Tuboi S, 873, 874, 879, 899
Tucker PW, 136
Tuckwell DS, 848
Tufféry P, 563–65
Tugendreich S, 328
Tuik R, 479
Tuller G, 887
Tullo A, 418
Tuma PL, 534
Turchi JJ, 79
Turck CW, 517, 518
Turina P, 723, 724
Turkenkopf IJ, 599
Turley H, 851
Turnbough CL Jr, 119, 124, 126, 135, 137, 138
Turnbough J, 180
Turner DH, 22, 37, 38, 41, 47, 48
Turner JR, 318
Turner L, 799
Turner NA, 250
Turner RJ, 138
Tuteja N, 77
Tyrrell DLJ, 350, 351
Tzagoloff A, 869, 871, 896, 897, 905, 906

U

Udgaonkar JB, 556, 561
Ueda I, 873
Ueda K, 396
Ueda N, 485, 665, 669
Uede Y, 616
Ueki J, 491
Ueki T, 560
Uelmen PJ, 618, 619, 622, 634
Ueno A, 131, 149
Ueno M, 24
Ueno R, 328
Ueyama N, 262
Uhlein M, 711
Uhlenbeck OC, 22, 23, 27–29, 36, 44, 49
Uhlendor PD, 615, 617
Uhlinger DJ, 495, 497
Ulbrandt ND, 210, 213
Ullner M, 569
Ullrich A, 489
Umbricht CB, 62–65, 67, 68, 73, 76, 79, 81, 83, 84
Umemoto M, 603
Umemoto S, 803
Umene K, 350, 377
Underwood D, 671
Underwood KW, 627, 629, 631
Ungermann C, 889, 890
Ungewickell E, 514, 519, 522, 523, 526, 537
Ungewickell H, 519, 537
Uno I, 477, 885, 894, 895
Uno T, 24, 50
UPTAIN SM, 117–72
Uprichard SL, 371, 372
Urano T, 498
Uratani Y, 218
Urbani L, 632
Urlaub H, 711
Usdin TB, 763, 774
Ushida C, 685
Usman N, 22, 30, 32, 37, 38, 40, 43, 48
Utsunomiya J, 463
Utter MF, 582
Uversky VN, 558, 561
Uyeda TQ, 795

V

Vaillancourt RR, 659
Vaillant F, 430
Valadi H, 357, 368, 369
Vale RD, 795, 802, 803
Valencia A, 104, 655
Valera A, 596
Valgeirsdottir K, 462
Valinsky JE, 307
Valius M, 488, 489
Vallar L, 650, 659, 661
Vallee RB, 534, 536
Vallette FM, 868, 884
Van Aken T, 646, 652, 655
van Beeren M, 593
van Biesen T, 489
van Blitterswijk WJ, 500
Van Camp G, 839
Vance DE, 226
Vancurova I, 85
Vandenbark GR, 586, 587, 590, 592, 602
van den Berg JA, 873, 875
Van den Berg MC, 341
Vandenbergh DJ, 136
Vandenhee JR, 811
van der Bliek AM, 534
van der Drift C, 288, 295
van der Horst G, 29
van der Klei I, 864, 880, 889, 891, 892, 898, 899
van der Klei IJ, 877, 878, 880, 879, 898
Van Der Kroef WMJ, 328
van der Meijden P, 295
van der Merwe PA, 854, 856–58
van der Meulen J, 497
van der Ploeg LHT, 461
Vanderstraeten S, 421
van der Vies SM, 895
Van der Vliet PC, 75
van de Sande JH, 211
Van de Woude G, 190, 353
Van Dop C, 650, 661, 671
Vandre DD, 317, 325
Van Dyck E, 421
van Dyck L, 894
Van Dyke MW, 131
van Embden JD, 457
van Eynde A, 813
Vanfleteren J, 574
van Galen PJM, 667
van Gent DC, 441, 448
van Gool WA, 387, 392
van Haaren MJ, 443, 457
van Haastert PJM, 478, 479
van Halbeek H, 324
van Heerde WL, 868
Van Helvoort JMLM, 97
Van Herp F, 341, 343
van Heusden BP, 875
Van Heusden GPH, 873, 875
van Hoof PJM, 662
Van Houten B, 131, 141
Van Houwe G, 189
Vanier MT, 629
van Lelyveld P, 599
van Leuven F, 813
Van Loon APGM, 904, 905
van Luenen HGAM, 446, 448
van Meurs J, 466
van Ommen GJ, 120, 145
van Raaij MJ, 719, 722
van Ryk DI, 709
VanSickle EP, 456
van Soolingen D, 457
Van Steijn GJ, 328
van't Hof R, 867, 900
Van Tuyle GC, 418, 421
van Walraven HS, 737, 740
van Zastrow M, 542
Varani G, 687
Varga-Weisz PD, 154

Varley A, 109
Varmus HE, 439, 443, 447, 448, 458
Vasiliev VD, 686
Vasilyeva EA, 729–31, 734, 743
Vásquez M, 551, 564
Vassallo C, 851, 853
Vater CA, 536
Vaughan M, 494
Vaughan PJ, 364, 370, 371
Vaughn DE, 825
Vaxillair M, 596
Vazeux R, 851
Veenhuis M, 892, 896
Veerapandian B, 845, 846
Vega QC, 488
Veit M, 650
Velculescu VE, 767, 774, 776, 778, 779
Veltri KL, 430
Venkatesan S, 175, 617, 626
Venkatesh S, 500
Ventner JC, 762
Vepa S, 498
Verburg JG, 729
Verdiere J, 900
Verger R, 491
Verhave M, 808
Verma IM, 809, 810
Vermeulen W, 156
Verner K, 864, 876
Verrall RE, 556
Verri A, 373
Vestweber D, 831, 876–78, 882, 885, 888, 889, 891, 892, 894
Vetter I, 651
Vicente M, 104, 392, 397
Vidnes J, 599, 600
Vidugiris GJA, 561
Vierling E, 113
Vieth M, 569
Vigers GPA, 515, 519, 538
Vignais PV, 728, 732
Vigo-Pelfrey C, 387
Vigouroux C, 596
Vihtelic TS, 490
Viitanen PV, 895, 896
Vijaya S, 447
Vijayasarathy C, 418
Vik SB, 726, 739, 743, 799
Vila A, 710
Villani G, 358, 364, 370
Villanueva MS, 461
Villeponteau B, 136
Vilpo JA, 80
Vincent MG, 555
Vinograd J, 424
Vinogradov AD, 729–31, 734
Vinogradov SN, 574
Vinson C, 590
Vinters HV, 395
Vionet N, 596
Virbasius JV, 430
Viril-Farley J, 710
Virshup DM, 62, 63, 66, 68, 73, 81
Virtanen A, 185
Viscontini A, 237
Visse R, 374
Vitek MP, 767, 769
Vitols E, 301
Vlasak R, 341
Vlazny DA, 353
Vo NV, 133
Voelker DR, 207
Vogel U, 120
Vogel US, 659
Vogels GD, 288
Vogelstein B, 778, 779
Volkmann N, 686
Volknandt W, 516, 524
Volkovoi KI, 491
Vollrath B, 107, 108
Von Ahsen O, 888
von Ahsen U, 697, 705
von Bohlen K, 686
Vonder HR, 879
Vonderheide RH, 853
von Döhren H, 338
von Eichel-Streiber C, 495
von Figura K, 525, 539
von Haeseler A, 423
von Heijne G, 220, 866, 872, 892, 895, 903
von Hippel PH, 120–22, 133, 157
von Meyenburg K, 209
Vonsattel J-P, 392, 398
von Waes MA, 696, 703, 704
von Winkler D, 62, 63, 68, 74, 76, 78
Voos W, 537, 880, 879, 885, 888, 895, 901, 904
Voronoi GF, 552
Vos JC, 442, 446
Voskova A, 887
Voss H, 692
Vostal JG, 317, 325
Voytas DF, 450, 451, 453, 457, 462
Vreekamp RH, 480
Vulfson EN, 730
Vyle JS, 27, 41, 42

W

Wachter C, 864, 876, 879, 882, 889, 891, 901, 905, 906
Wachter E, 892, 904
Wada A, 558
Waddell CS, 449, 454, 467
Wade RH, 803
Wade SM, 671
Wade WS, 390, 391, 396, 398, 399, 402, 404
Wadzinski BE, 812
Waeber G, 812, 814
Waga S, 79
Wagner A, 651, 654
Wagner EGH, 186
Wagner G, 852, 856
Wagner I, 894
Wagner JA, 808, 809, 811
Wagner LA, 134, 135
Wagner R, 123, 131, 137
Wagner S, 811, 814
Wahl AF, 68
Wahl MI, 483, 487
Wahl R, 240, 250, 257
Wahli W, 766, 768
Wailes LM, 811
Waisman DM, 211
Waizenegger I, 320
Wake RG, 97
Wakeham SG, 242
Wakem LP, 559
Waksman M, 491, 499
Walberg MW, 415
Wald G, 5
Waldherr M, 887
Waldo GL, 478, 484, 485
Waldrop AA, 766
Walker GC, 104, 373
Walker JE, 356, 363, 374, 449, 642, 719, 721, 722, 724, 727, 733, 741, 742, 801
Walker PMB, 757
Wall MA, 666–70
Wallace DC, 410, 429, 430
Wallace HM, 365
Wallace MR, 463
Waller PR, 685
Wallimann T, 892
Wallqvist A, 569
Walls PH, 554
Walsh C, 22, 30
Walsh DA, 809
Walsh FS, 834
Walstra GJM, 387, 392
Walter P, 905
Walters DE, 236, 255
Waltho JP, 560
Waltner M, 867
Walton KM, 811
Wand AJ, 559, 561
Wang AHJ, 641
Wang BQ, 147, 148
Wang CH, 621
Wang D, 127, 129, 144, 148
Wang DG, 120, 123, 125, 128, 132, 143, 157, 159, 160, 162, 163
Wang D-S, 481
Wang FS, 340, 791, 795

Wang GT, 390, 391, 396, 398, 399
Wang H, 618, 619, 624, 634
Wang JC, 131
Wang J-F, 37, 38, 648, 652, 683
Wang JH, 851, 852, 855, 856
Wang L-H, 521, 526, 534
Wang L-P, 483
Wang ND, 586, 590, 602, 606
Wang P, 492, 499
Wang QM, 811
Wang R, 112
Wang SG, 340
Wang SX, 461
Wang TS-F, 77, 369
Wang W, 450
Wang X, 111, 112
Wang XD, 96, 98, 626
Wang XH, 439, 444, 452
Wang XM, 491
Wang XY, 900
Wang Y, 214, 866–68
Wang YE, 834, 836, 838
Wang Y-H, 572, 573
Wang YL, 608
Wang YS, 361, 367, 368
Wang YX, 420, 421, 687
Wang Z, 542, 763, 774, 776, 802
Ward DC, 766, 768
Ward HD, 317
Ward JE Jr, 96, 107
Waring RB, 28, 47
Warner G, 617
Warner GE, 624
Warner GJ, 627, 631
Warner JR, 130, 150, 680
Warner LE, 842
Warner RC, 298
Warnock DE, 513, 530, 534, 535
Warren G, 529, 533, 534
Warren RA, 541
Warren SG, 242
Warshel A, 34, 660, 661
Warthoe P, 778
Wartusch B, 712
Washington MT, 744
Wassarman DA, 49
Wassermann K, 427
Waszkuc W, 499
Watanabe K, 340, 341, 343
Watanabe M, 671
Watanabe T, 342, 479, 685
Watanabe Y, 481
Waterfield MD, 136, 481, 488
Waters CM, 541, 542
Waters MG, 501, 873
Waterston RH, 446
Wathen MW, 352
Watson AJ, 485, 665
Watson DH, 364, 368
Watson JD, 680, 754
Watson MA, 442
Watson N, 487, 664
Watson RJ, 136
Watson S, 671
Watts C, 540
Watts SD, 724
Watts VJ, 485
Waugh DS, 655
Waugh K, 633
Wayman G, 811
Weaver DL, 560
Weaver DT, 80, 84, 85, 456, 464
Weaver ZA, 149
Webb CD, 110
Webb MR, 654, 659
Webber AN, 722
Weber J, 732, 738, 739
Weber K, 324, 429, 526
Weber PC, 352
Webster DR, 789
Webster RE, 201
Webster SD, 399
Wedd AG, 258
Wedegaertner PB, 650, 669
Weeks JD, 554
Weeks JR, 155
Weeks KM, 29
Weeks R, 207
Wegmann G, 902
Wegnez M, 456
Wei C-L, 189
Wei F-S, 500
Wei X, 329, 330
Weidemann W, 341
Weih F, 815, 819
Weiher H, 447
Weijland A, 654, 684
Weil CF, 457
Weiland DA, 615, 626
Weiland FT, 513
Weiland P, 426
Weilbaecher R, 157
Weinart TA, 106
Weinbauer GF, 606
Weinberg DH, 62, 63, 66, 68, 73, 79, 81
Weinberg JM, 456
Weinberg-Zahlering E, 350, 351
Weiner AM, 153, 194
Weiner H, 214, 866–68, 879
Weiner JH, 241
Weiner K, 867
Weiner SJ, 553, 572
Weinfeld M, 80, 85
Weinmann R, 322
Weinreb PH, 396, 404
Weinstein IB, 426
Weinstein S, 686
Weintraub H, 766, 769, 774, 776
Weinzierl A, 898
Weinzierl RO, 816
Weir AC, 361, 370
Weir HM, 354, 356
Weis WI, 825
Weisbalt DA, 301
Weisberg RA, 142
Weiser B, 692
Weiser J, 684
Weisgraber KH, 388, 390, 391, 394, 395, 399
Weisner RJ, 424
Weiss DS, 289, 294, 295
Weiss H, 892, 904
Weiss R, 24
Weiss RB, 134, 135
Weissbach A, 365
Weissbach H, 272, 278
Weissbach L, 62, 63, 66, 68, 78
Weissborn AC, 204
Weiss–Brummer B, 710
Weisshart K, 364–67, 371, 372
Weisslitz M, 368
Weissman JS, 896
Weissman S, 182
Weissman SM, 766, 768, 771
Weitckus S, 572
Weitzmann CJ, 708, 711
Welch CL, 622
Welch WJ, 895
Welcher AA, 766, 768
Weldon SL, 583, 599
Weller SK, 349, 352, 355, 356, 363, 368, 370–72, 375
Wells D, 123, 124, 128, 129, 146
Wells JA, 43
Wells R, 324
Wells RD, 352
Welsh CJ, 492
Welsh JB, 541
Welsh TM, 144, 152, 153
Wen W, 812, 813
Wen ZQ, 558, 559
Wendoloski JJ, 565
Wenger DA, 629
Wensel TG, 486
Wenzel TJ, 873, 875
Wera S, 813
Werner M, 22
Werner-Washburne M, 873
Wernette CM, 420
Wertelecki W, 427
Wessel R, 226
Wessinger ME, 851
Wessler SR, 457
West HL, 395
West MA, 512, 516, 540
West MW, 574
Westerfeld JG, 43
Westermann B, 885, 888, 889, 894, 895, 897
Westheimer FH, 30
Westhof E, 24, 28, 44

Westphal KH, 767, 769
Wetlaufer DB, 557
Wetmur JG, 754, 769
Wetzel R, 386, 387, 390–96, 398, 402
Wexler RR, 621
Wheat WH, 812
Wheatley VR, 619
Wheelis ML, 112
Whelan J, 872, 895
White AD, 616, 617
White HA, 307
White O, 111, 112, 185, 275, 762
White RJ, 131
White SA, 687
White SW, 687
White T, 143
Whitehall SK, 132
Whiteway M, 669
Whitfield KM, 423
Whitford M, 317, 326
Whitney JA, 512, 532
Whitson JS, 395
Whitt SA, 33
Whitty A, 6
Wiater LA, 458
Wice BM, 329, 330
Wichner W, 212, 213
Wickens M, 190
Wickham TJ, 847
Wickman KD, 666
Wickner W, 97, 212, 213, 221
Wickner WT, 864
Widmer H, 53
Widom J, 130
Wiedmann M, 877, 880, 879
Wieland F, 633
Wieland I, 768, 774
Wienhues U, 885, 889
Wienk HL, 224
Wiersinga WM, 593
Wieslander Å, 203, 222–24
Wiest DK, 120, 125, 128, 129, 143, 144, 148
Wiggs J, 120
Wight TN, 392
Wigler M, 768, 770, 771, 774, 777
Wigley DB, 744
Wikander G, 223
Wilcock D, 372
Wilcox ER, 767, 769
Wilde A, 521, 532
Wilde RG, 617
Wildy P, 364, 368
Wiley HS, 541
Wilhelm D, 818
Wilk RR, 574
Wilk-Blaszczak MA, 484
Wilke CM, 451
Wilke TM, 664, 665
Wilke-Mounts S, 732, 738, 739
Wilkemeyer MF, 275
Wilkens S, 719, 720, 723, 724, 727, 796
Wilkie AOM, 843, 855
Wilkie NM, 350, 351, 355, 368
Wilkie TM, 487
Wilkins S, 720
Wilkinson T, 258
Willems J-P, 301
Willems L, 814
Willems P, 839
Willenbrock F, 275
Willhelm L, 370
Williams A, 43
Williams AF, 825, 828, 829, 851, 852, 854–57
Williams AJ, 421
Williams AS, 151
Williams AW, 743
Williams CP, 583, 596
Williams GA, 326
Williams GD, 735, 738
Williams JB, 642
Williams JS, 811
Williams KP, 155, 365, 367
Williams KR, 62
Williams LA, 138, 149
Williams MA, 553
Williams MJ, 843, 845
Williams MV, 374
Williams RJP, 30
Williams RL, 479, 480, 482
Williams RO, 461
Williams RS, 417, 421, 430
Williams RT, 85
Williams SP, 461
Williamson JR, 24, 488, 489
Williamson R, 759
Willingham MC, 317, 318
Willis A, 843, 855
Wills F, 79
Wills NM, 709
Wilmanns M, 481
Wilschut J, 896
Wilson AC, 419, 420, 423, 426
Wilson C, 24, 564, 569
Wilson DM, 218
Wilson GL, 426, 427, 558, 559
Wilson IA, 670
Wilson K, 41, 643, 655, 662
Wilson KS, 120, 687
Wilson L, 99
Wilson PB, 492
Wilson PT, 650, 669
Wilson R, 64
Wilson TH, 217, 218
Wilson V, 764
Wilson WE, 339, 341
Wimberly B, 687
Winchester E, 62, 65, 68, 72, 75, 76, 79, 81
Winckler T, 901
Winge DR, 255, 257
Winitz S, 650
Winkelmann JC, 481
Winker S, 687
Winkler ME, 126
Winning BM, 869
Winston F, 154, 451
Wintermeyer W, 682–84, 697
Winterrowd CA, 583
Wirtz KWA, 500
Wise JG, 729, 738
Withers-Ward ES, 447
Withka JM, 852, 856
Witte ON, 481
Wittig B, 671
Wittinghofer A, 643–46, 650, 651, 653–56, 659, 660, 662–64
Wittmann HG, 686, 689
Wittmann-Liebold B, 680, 711
Wittwer CU, 373
Wlodawer A, 566
Wobbe CR, 62, 63, 66, 68, 78
Wodak S, 553, 563
Wodak SJ, 568, 569
Woelfle K, 302
Woese CR, 112, 687, 692, 709
Wohlgemuth J, 455
Wohlrab F, 352
Wohlrab H, 879
Wold BJ, 759
WOLD MS, 61–92; 62, 63, 65, 66, 68–70, 72, 73, 75, 76, 78, 79, 81–83, 85–87
Woldringh CL, 95, 97, 104, 106, 107
Wolf LG, 667
Wolfe CL, 871
Wolfe PB, 221
Wolfenden R, 23, 34, 43, 50
Wolff CE, 843
Wolff HL, 856
Wolffe AP, 130, 447, 448
Wolf-Watz H, 109
Wolkow CA, 452, 453
Wollenzien P, 699, 700, 709
Wolynes PG, 555, 558
Wong BR, 516, 524
Wong C, 462, 463
Wong DH, 514, 516–19, 537
Wong JMS, 80
Wong L-P, 480
Wong ML, 145, 160, 517
Wong PC, 325
Wong SW, 353
Wong SY, 330
Wong TW, 412, 420–22
Wong YW, 854
Woo NH, 24
Wood HG, 272
Wood JM, 729

Wood RD, 62, 79, 80, 86
Wood SJ, 386, 387, 390, 392, 393, 396, 398, 402
Woodford JK, 633
Woodruff L, 541
Woods DD, 278, 759
Woodson J, 486
Woodson SA, 47
Woodward MP, 515
Woodward S, 367, 368
Woodward-Graves KL, 363
Wool IG, 687
Woolenweber LA, 529, 533, 534
Woolford C, 895
Woollett LA, 626, 633
Wooten DC, 725
Wooten T, 711
Wootton JC, 236, 255
Worrad D, 373
Worthylake R, 541
Wower IK, 712
Wower J, 690, 697, 704, 711, 712
Woychik NA, 155
Wozniak RW, 320
Wright CT, 422
Wright DA, 136, 451, 453, 462
Wright GE, 373
Wright HT, 24
Wright LG, 596
Wright PE, 423, 559–61
Wright R, 851
Wright S, 125
Wrutniak C, 430
Wu AM, 179
Wu C, 119, 124, 140, 154
Wu CA, 355
Wu DG, 484
Wu DQ, 484–86
Wu HC, 204, 208
Wu I, 722
Wu J, 219
Wu JH, 220
Wu LC, 559
Wu LJ, 110, 207, 490, 491
Wu M, 871
Wu SH, 596
Wu S-K, 670
Wu XJ, 616
Wu Y, 79
Wu YP, 485
Wu YQ, 486
Wu ZL, 811
Wuebbens MW, 237
Wuestehube LJ, 527
Wulff M, 672
Wurmser A, 664
Wykle RL, 492, 499
Wylie DE, 317, 329
Wyman J, 43
Wynne J, 321
Wynshaw-Boris A, 592, 594, 599, 808
Wyss DF, 852, 856
Wyss M, 902

X

Xanthoudakis S, 321
Xia WM, 205, 209, 210
Xia Y, 396
Xia YR, 622
Xiang K-S, 596
Xiang Y, 136, 143, 144
Xiao H, 144
Xiao Z-G, 258
Xie Z, 150, 156
Xiong H, 739
Xiong Y, 461, 462, 464
Xiong YE, 462, 463
Xu B-J, 414, 415, 425
Xu F-F, 183, 184, 186, 187
Xu H, 535
Xu JZ, 766, 768
Xu LW, 491
Xu MQ, 47
Xu Q, 149
Xu XX, 630
Xu YL, 814
Xu Z-S, 317, 325
Xue Z, 721, 733
Xuong N-H, 845, 846

Y

Yaffe MP, 873, 874, 884
Yager DR, 371, 372
Yager TD, 121, 122, 133, 157
Yagi H, 739
Yaginuma K, 418
Yagisawa H, 477, 481
Yamada H, 561, 726
Yamada KM, 846, 847
Yamaguchi H, 215
Yamaguchi M, 902
Yamaguchi T, 561
Yamaizumi Z, 643, 645, 646, 652, 655, 660, 662
Yamaki T, 395
Yamamoto KK, 809
Yamamoto KR, 592
Yamamoto T, 478
Yamamoto Y, 463
Yamane T, 491
Yamanouchi K, 257, 258
Yamasaki T, 586, 590, 592, 595
Yamashita E, 215
Yamashita J, 179, 180
Yamashita K, 144
Yamashita S, 206
Yamato I, 217, 221
Yamaya H, 558, 561
Yamazaki T, 487
Yan H, 66, 75
Yan YW, 855, 856
Yanagawa H, 24
Yanagida T, 791
Yanagishita M, 316
Yancey SD, 188
Yanfosky C, 119, 124
Yang AJ, 404
Yang H, 618, 619, 622
Yang J-J, 193, 440, 464, 465, 467, 526
Yang LJ, 488, 489
Yang M, 884, 892, 895
Yang SF, 492
Yang SQ, 604, 606
Yang S-Z, 671
Yang W, 448
Yang X, 128
Yang XJ, 819
Yang Y, 24
Yankner B, 386
Yankulov K, 144
Yankulov KY, 156
Yanofsky C, 126, 180
Yanofsky CL, 180
Yao L, 481
Yao M, 147
Yao X, 371
Yarnell WS, 128, 153, 157
Yarus M, 24, 28–30, 32, 49
Yasuda A, 341, 343, 391, 396
Yasuda R, 742
Yasuda Y, 341, 343
Yasuda-Kamatani Y, 340, 341, 343
Yasukawa T, 818
Yasukochi Y, 147
Yates R, 207
Yau P, 829, 831
Ybe JA, 561
Ye F, 421
Ye J, 624
Ye W, 526
Yeaman SJ, 617, 623
Yee A, 388, 394, 395, 397
Yee DP, 571
Yeh J, 324
Yen TJ, 461
Yeung D, 599, 600
Yeung T, 512, 513
Yi F, 667, 669
Yi Q-M, 109
Yin H, 163
Yin S, 141
Ying Y, 632
Ying YS, 632
Yoder BL, 77

Yoder JI, 457
Yoder MD, 647
Yohda M, 731
Yoko-o T, 477
Yokogawa T, 685
Yokoi TJ, 151
Yokota H, 770, 771, 774
Yokoyama C, 626
Yokozeki T, 495, 497
Yonaha M, 147
Yonath A, 686, 689
Yoneda M, 429
Yoneda N, 603
Yoneda Y, 873
Yong VW, 870, 899
Yoon HS, 149, 481
Yoon J, 478
Yoo-Warren H, 583
Yoshida K, 603
Yoshida MC, 428, 481, 720, 722, 729–31, 739, 742
Yoshida S, 77, 211, 365, 885, 894, 895
Yoshida T, 899
Yoshida Y, 593
Yoshii J, 779
Yoshikawa H, 787, 795
Yoshimura H, 720
Yoshinaga SK, 592
Yoshioka T, 490
Yost SC, 851
Young B, 22, 23
Young CG, 236, 257, 258
Young D, 355, 367, 368
Young EC, 803
Young MC, 121, 133
Young RA, 121, 155
Youngman P, 109
Youssoufian H, 462, 463
Yoza BK, 418
Ysern S, 720
Yu C-L, 500, 618
Yu D, 194
Yu F, 79
Yu HT, 670
Yu N-T, 307
Yu P-L, 175
Yuan C-S, 328
Yuan H, 896
Yuan Y, 420
Yue K, 569
Yue K-Z, 571
Yue X, 136, 146
Yun JS, 588, 590, 594, 601, 605, 607
Yun Y, 809
Yung BY, 209
Yusupov MM, 686, 700

Z

Zabalou S, 455
Zagorski MG, 391, 396
Zähner H, 338
Zakharov SD, 725
Zakharova NM, 491
Zalkin H, 138
Zamojska R, 556
Zangrando E, 308
Zanotti F, 739
Zara V, 869, 879
Zardeneta G, 221, 867
Zaritsky A, 104, 453
Zasloff M, 339
Zaug AJ, 20, 22, 23, 32, 46
Zawel L, 119, 153, 156, 321, 322
Zaychikov E, 160
Zaytsev-Bashan A, 686
Zeidler M, 192
Zeimetz GM, 201, 205
Zelder O, 275, 285, 291, 296, 299, 300, 302
Zelenaya-Troitskaya O, 425
Zemelman BV, 352, 378
Zen K, 220
Zen KH, 220
Zeng J, 770, 772
Zeng K, 670
Zengel JM, 137, 152, 417
Zerial M, 538
Zernik-Kobak M, 80, 84
Zeviani M, 421
Zha X, 623
Zha XH, 623, 632
Zhang A, 29
Zhang C, 490, 532
Zhang G-F, 494
Zhang H, 572, 573
Zhang J-G, 685, 743
Zhang JZ, 528, 530, 542
Zhang K, 691
Zhang L, 778, 779, 901
Zhang P, 439, 452, 456
Zhang R, 555
Zhang S, 62, 69, 77
Zhang W, 131, 141
Zhang X, 351
Zhang XM, 535
Zhang X-P, 848, 852
Zhang Y, 41, 157, 724, 736
Zhang ZF, 902
Zhao C-R, 107, 108
Zhao R, 796
Zhao S, 282
Zhao XD, 80, 811, 839
Zhao Y, 271, 296, 300
Zhao Z, 500
Zheltonosova J, 648, 683
Zheng J, 211, 481
Zheng L, 491
Zheng Q, 567
Zheng XX, 894, 896
Zheng Y-M, 418
Zhivkov V, 329
Zhivkova Y, 329
Zhong J-M, 654, 655
Zhou BS, 371
Zhou C, 480
Zhou J-M, 721, 735, 738, 799
Zhou K, 24, 40, 44
Zhou M-M, 481
Zhou Q, 143, 152
Zhou S, 526, 725
Zhou SQ, 740
Zhou W, 131, 141, 160
Zhou XL, 740
Zhou Y, 134, 741, 797
Zhu J, 688, 689
Zhu LA, 355, 363
Zhu Y, 486, 664
Zhu Z, 809
Zichi DA, 554
Ziegelhoffer T, 873
Ziegler M, 725
Zilberstein A, 487
Zillig W, 149, 183
Zimmer DB, 582, 605
Zimmerly S, 440, 464, 465, 467
Zimmermann RA, 680, 876, 690, 697, 704, 711, 712
Zimniak L, 23, 705
Zollner A, 891, 899–901
Zopf D, 583
Zorzoli A, 599
Zou S, 451, 453, 462
Zucchini S, 373
Zuckerman SH, 428
Zufall N, 877, 878, 886
Zuker CS, 207, 490, 491
Zumstein E, 185
Zundel G, 735, 736
Zusman DR, 217
Zvelebil MJ, 481, 535
Zwaal RR, 466
Zydowsky TM, 279
Zylicz M, 887
Zyrianova IM, 707

SUBJECT INDEX

A

A* algorithm
  protein folding and, 565
ABF1 protein
  replication protein A and, 86
Ab initio-based methods
  protein folding and, 549, 565–66, 568–69, 571, 573
Absolute packing efficiency
  protein folding and, 552
Abundance classes
  mRNA
    subtractive cloning and, 760–61, 773
Acanthamoeba sp.
  transcript elongation and, 130
ACAT gene
  acyl-coenzyme A:cholesterol acyltransferase and, 618–19, 621–22, 634
Accessory factors
  choosing insertion site and, 437, 448–52
  mtDNA maintenance in vertebrates and, 420–21
  transcript elongation and, 146–55
AC element
  plant
    choosing insertion site and, 457–58
Acetaldehyde
  movement in biological systems and, 12
N-Acetylglucosamine
  O-linked glycosylation and, 315
Acetamide
  B_{12}-dependent enzymes and, 271
Acetogens
  B_{12}-dependent enzymes and, 291–93, 309
2-Acetoxy-2-acetylaminofluorene
  replication protein A and, 73
Acetylcholinesterase
  and amyloid seeding in Alzheimer's disease and scrapie, 392, 397
Acetylene hydratase
  molybdenum-cofactor-containing enzymes and, 241
Acetylimidazole
  movement in biological systems and, 8
Achatin I
  D-amino acids in animal peptides and, 340
Acholeplasma laidlawii
  membrane phospholipid diversity and, 223–24
Acid-base catalysis
  and RNA and protein enzyme catalysis, 24
Acidosis
  renal
    PEPCK gene expression and, 585, 593
Actin
  force effects on kinetics and, 789–90, 792–93, 795–96
  Z ring and, 104
α-Actinin
  force effects on kinetics and, 795
Actinomycin D
  D-amino acids in animal peptides and, 338, 342
Activation cycle
  B_{12}-dependent enzymes and, 269
Activation enthalpy
  force effects on kinetics and, 787
Activation fragment
  methionine synthase and, 286–88
Activator proteins
  transcript elongation and, 143, 150
Active site
  molybdenum-cofactor-containing enzymes and, 242, 244–47, 251–53, 257, 260–63
  and RNA and protein enzyme catalysis, 39–40, 46, 48, 54
Acyl-coenzyme A:cholesterol acyltransferase (ACAT)
  adenoviral gene transfer, 621–22
  as allosteric enzyme, 625–27
  antibodies, 622–23
  in atherosclerosis, 615
  biochemistry, 617–23
  cholesterol, 624–25, 632–33
    cholesterol-cholesteryl ester cycle, 631–32
    flux into and out of endoplasmic reticulum, 627–33
    pools, 625–27
  cloning and functional expression of ACAT cDNAs, 618–21
  enzymology, 617–18
  fatty acids, 633–34
  gene expression, 634
  gene knockout, 621–22
  genomic organization, 622
  historical aspects, 614
  isoforms of ACAT proteins/genes, 619, 621
  lipoprotein-bound cholesterol esters, 627, 629–31
  molecular biology and, 617–23
  nonsterol agents, 633–34
  oxysterol, 624–25
  pathophysiological roles, 615–17, 624
  as pharmaceutical target, 616–17
  phospholipids, 633–34
  physiological roles, 615–16
  sterol, 623–25
  tissue culture cell studies, 623–24
  tissue distribution of mRNAs, 619
Acyl enzymes
  movement in biological systems and, 8
Acyltransferases
  acyl-coenzyme A:cholesterol acyltransferase and, 619
  membrane phospholipid diversity and, 201
Adaptor protein complexes
  clathrin coated vesicles and, 511, 513–16, 519–27
  G protein structures and, 640
Adenine
  and RNA and protein enzyme catalysis, 32
Adeno-associated virus (AAV)
  choosing insertion site and, 441
Adenosine
  ATP synthase and, 721
Adenosine diphosphate (ADP)
  ATP synthase and, 717, 719–22, 725, 729–35, 737–38, 742
  force effects on kinetics and, 795, 802–4

membrane phospholipid diversity and, 214–16
movement in biological systems and, 15, 17–18
replication protein A and, 86
Adenosine monophosphate (AMP)
molybdenum-cofactor-containing enzymes and, 237
movement in biological systems and, 5–6
Adenosine triphosphate (ATP)
ATP synthase and, 717–40, 742–44
B_{12}-dependent enzymes and, 292
force effects on kinetics and, 786, 794–95, 799, 802–3
membrane phospholipid diversity and, 210–16
movement in biological systems and, 5, 14–18
prokaryotic poly(A) mRNA and, 183, 189–90
protein import into mitochondria and, 861
replication protein A and, 76
Adenosylcobalamin
B_{12}-dependent enzymes and, 271
*S*Adenosylmethione
membrane phospholipid diversity and, 202
Adenovirus
acyl-coenzyme A:cholesterol acyltransferase and, 621–22
transcript elongation and, 143–44
Adenylate residues
prokaryotic poly(A) mRNA and, 181–82, 191–92, 194
Adhesion complexes
cell adhesion molecules and, 823, 832, 834, 836
Adhesion sites
molecular structure and, 851, 856–57
Adipose tissue
PEPCK gene expression and, 581, 584, 587–89, 600–1, 606
ADP-ribosylation factor
membrane phospholipid diversity and, 211
Adrenocorticotropic hormone (ACTH)
acyl-coenzyme A:cholesterol acyltransferase and, 621
AF-1 accessory factor
PEPCK gene expression and, 586, 591
Affinity chromatography
replication protein A and, 63
Affinity tags
prokaryotic poly(A) mRNA and, 184
Aflatoxin B1
mtDNA maintenance in vertebrates and, 427
Agatoxins
D-amino acids in animal peptides and, 341–43
Agelenopsis aperta
D-amino acids in animal peptides and, 341
Aging
mtDNA maintenance in vertebrates and, 426
Agonists
clathrin-coated vesicles and, 542–43
Alanine
D-amino acids in animal peptides and, 339–41, 343–44
ATP synthase and, 723, 735
B_{12}-dependent enzymes and, 288
G protein structures and, 655, 658
mtDNA maintenance in vertebrates and, 422
PEPCK gene expression and, 599
Aldehyde dehydrogenase
molybdenum-cofactor-containing enzymes and, 235
Aldehyde ferredoxin oxidoreductase family
molybdenum-cofactor-containing enzymes and, 234–36, 238–40, 258–63
Aldehyde oxidase
molybdenum-cofactor-containing enzymes and, 235
Aldehyde oxidoreductase
molybdenum-cofactor-containing enzymes and, 234–37, 240, 247, 249, 257, 259
ald mutant
acyl-coenzyme A:cholesterol acyltransferase and, 622
Algorithms
protein folding and, 553, 565, 568, 570–72, 574
Alkaline endo-exonuclease
herpes simplex virus DNA replication and, 347, 372
Alkaline phosphatases
and RNA and protein enzyme catalysis, 31, 41
Alkali treatment
subtractive cloning and, 765
Alkyl azide
movement in biological systems and, 10
Alkylcobalamin
B_{12}-dependent enzymes and, 269, 276
Alkyl piperidinium salt
and amyloid seeding in Alzheimer's disease and scrapie, 393
Alkyltransferase
mtDNA maintenance in vertebrates and, 427
Allosteric regulation
acyl-coenzyme A:cholesterol acyltransferase and, 613, 625–27, 634
ATP synthase and, 744
and RNA and protein enzyme catalysis, 45, 48–49
Alzheimer's disease
amyloid seeding and, 385–405
Amides
G protein structures and, 655
and RNA and protein enzyme catalysis, 31
Amines
and RNA and protein enzyme catalysis, 31
Amino acids
replication protein A and, 74, 83, 85–86
and RNA and protein enzyme catalysis, 20
D-Amino acids
in animal peptides
biosynthetic studies, 341–43
frogs, 339–40
history, 338–39
introduction, 337–38
purpose, 343
snails, 340–41
Amino-acyl tRNA
G protein structures and, 648, 656–57, 663, 673
Aminomutases
B_{12}-dependent enzymes and, 272
Aminopeptidases
D-amino acids in animal peptides and, 343
Aminopropanol
B_{12}-dependent enzymes and, 271

Amphibians
D-amino acids in animal peptides and, 338–40, 343–44
Amplification methods
G protein structures and, 664
subtractive cloning and, 763–64, 770
AMP-PNP
ATP synthase and, 720, 733
Amyloid seeding
in Alzheimer's disease and scrapie
apolipoprotein E, 394–95
atomic force microscopy, 398–99
birefringent Congo red binding, 398
critical concentration, 389–93
difficulty of measuring amyloid formation, 396–97
electron microscopy, 397
endogenous proteins, 392–95
fibril formation, 390–91, 396
heterogenous seeding, 401–2
introduction, 386–88
in vitro model of prion protein formation, 401
kinetics, 394–95, 399
lag time, 393–95
morphological isomers, 402
nucleation-dependent Aβ amyloid formation, 389–96
quasi-elastic light scattering, 398
sedimentation, 398
seeded polymerization, 399–405
seeding, 395–96
stochastic variability, 399
thioflavin T-induced fluorescence, 398
turbidity, 397–98
unnatural molecules, 392–93
Anabaena sp.
and RNA and protein enzyme catalysis, 45–46
Andriamycin
membrane phospholipid diversity and, 214
Anhydrides
movement in biological systems and, 5
Animal peptides
D-amino acids and, 337–44
Anionic phospholipids
membrane phospholipid diversity and, 207–16
Annealing reaction
protein folding and, 565–66
subtractive cloning and, 755, 759, 770
Annuli
Z ring and, 106
Antibiotics
D-amino acids in animal peptides and, 338
and amyloid seeding in Alzheimer's disease and scrapie, 393
membrane phospholipid diversity and, 214
PEPCK gene expression and, 608
and ribosomes and translation, 700–2, 706, 708, 711
Antibodies
acyl-coenzyme A:cholesterol acyltransferase and, 622–23
D-amino acids in animal peptides and, 340
ATP synthase and, 723
force effects on kinetics and, 787
membrane phospholipid diversity and, 219
prokaryotic poly(A) mRNA and, 189–90
replication protein A and, 66, 68, 79
and RNA and protein enzyme catalysis, 49
transcript elongation and, 120
Z ring and, 105
Antigens
force effects on kinetics and, 787
O-linked glycosylation and, 330
replication protein A and, 68
Antimicrobial agents
D-amino acids in animal peptides and, 337
Z ring and, 114
Antisense RNA
prokaryotic poly(A) mRNA and, 186–87, 194
Z ring and, 96
Antitermination
transcript elongation and, 151–53
Antiviral drugs
mtDNA maintenance in vertebrates and, 426
Anucleate cells
Z ring and, 96
Aphidicolin
mtDNA maintenance in vertebrates and, 420
Apo-B-containing lipoprotein
acyl-coenzyme A:cholesterol acyltransferase and, 616
Apoenzymes
B_{12}-dependent enzymes and, 269
Apolipoprotein E
and amyloid seeding in Alzheimer's disease and scrapie, 388, 394–95
Apomyoglobin
protein folding and, 559–61
APP protein
and amyloid seeding in Alzheimer's disease and scrapie, 392
Apurinic/apyrimidinic endonuclease
mtDNA maintenance in vertebrates and, 427
Arabidopsis thaliana
molybdenum-cofactor-containing enzymes and, 255
protein import into mitochondria and, 885
Z ring and, 113
Archaea
prokaryotic poly(A) mRNA and, 193
Archaebacteria
B_{12}-dependent enzymes and, 269
Z ring and, 94, 112–13
Arf proteins
G protein structures and, 646–47, 653
phospholipase D and, 493–94
Arginine
ATP synthase and, 721–22, 739
B_{12}-dependent enzymes and, 287, 305
G protein structures and, 661–62, 667
molybdenum-cofactor-containing enzymes and, 262
Arrest
transcriptional
transcript elongation and, 120, 123–25, 128
ARS sequences
replication protein A and, 68
Arteriosclerosis
movement in biological systems and, 6–7
Artifacts
prokaryotic poly(A) mRNA and, 177
Asparagine
ATP synthase and, 739

B_{12}-dependent enzymes and, 288
G protein structures and, 654
mtDNA maintenance in vertebrates and, 422
Aspartate
D-amino acids in animal peptides and, 340
ATP synthase and, 735, 738
B_{12}-dependent enzymes and, 284–86, 288–90, 306, 308
cell adhesion molecules and, 850–51
G protein structures and, 650, 653–54, 663, 667
molybdenum-cofactor-containing enzymes and, 262
and RNA and protein enzyme catalysis, 20
Aspergillus niger
molybdenum-cofactor-containing enzymes and, 237
Assembly protein 180
clathrin-coated vesicle formation and, 526
Association
cell adhesion molecules and, 823
Atherosclerosis
acyl-coenzyme A:cholesterol acyltransferase and, 613, 615–17, 634
Atomic force microscopy
and amyloid seeding in Alzheimer's disease and scrapie, 397–99
force effects on kinetics and, 785, 787
Atoms
protein folding and, 551–53, 563–66
ATPases
force effects on kinetics and, 785–86, 794–96, 798–800, 802–4
membrane phospholipid diversity and, 212–13
movement in biological systems and, 16–17
and RNA and protein enzyme catalysis, 49
Z ring and, 104, 107
ATP synthase
F_0 complex structure
E. coli F_0, 725–27
mitochondrial F_0 and stalk, 727–28
F_1-ATPase structure, 722
$\alpha 3\beta 3$ structure, 722–23
$\alpha 3\beta 3\gamma$ structure, 722–23
catalytic relationships of heart MF_1, 721–22
nucleotide binding sites, 721
structural information from various approaches, 723–25
X-ray and related structural probes, 719–21
hydrolysis by F_1-ATPase
evaluations of catalytic site occupancy, 732–33
kinetic evaluation of catalytic site occupancy, 728–31
other evaluations of catalytic site occupancy, 731
modulations of catalysis and conformation, 738–40
overview, 718–19
related catalyses, 743–44
rotational catalysis
catalytic and structural assessments, 740–42
coupling to proton translocation, 743
interactions between F_0 and F_1, 742–43
related catalyses, 743–44
synthesis by, 733
coupling to H^+ and Na^+ translocation, 735–38
evaluations of catalytic site occupancy, 735
kinetic evaluation of catalytic site occupancy, 734–35
Attenuation
transcript elongation and, 138–39
transcriptional regulation by cAMP and, 812–13
attTn7 gene
choosing insertion site and, 439
Autophosphorylation
Z ring and, 104
Aurovertin
ATP synthase and, 722
Auxiliary sorting factors
clathrin-coated vesicles and, 540–43
Avidin
force effects on kinetics and, 787
5-Azacytidine
PEPCK gene expression and, 601
Azide clock technique
movement in biological systems and, 10–11
Azoospermia
subtractive cloning and, 777

B

Ba^{2+}
membrane phospholipid diversity and, 224
Bacillus brevis
prokaryotic poly(A) mRNA and, 175
Bacillus P53 sp.
ATP synthase and, 733
Bacillus subtilis
membrane phospholipid diversity and, 202, 205
prokaryotic poly(A) mRNA and, 175–77, 181, 185
and RNA and protein enzyme catalysis, 29
transcript elongation and, 138–39, 142
Z ring and, 97–98, 100, 109–13
Backbone
B_{12}-dependent enzymes and, 284, 286, 306
protein folding and, 565, 567–69, 574
and ribosomes and translation, 700
and RNA and protein enzyme catalysis, 20–21, 33–34
Bacteria
D-amino acids in animal peptides and, 337–38, 340, 344
force effects on kinetics and, 785, 796–802
membrane phospholipid diversity and, 201, 204, 216, 223
molybdenum-cofactor-containing enzymes and, 237
prokaryotic poly(A) mRNA and, 173–95
subtractive cloning and, 764, 769
Z ring and, 93–114
Bacterial chromosome-binding protein
mtDNA maintenance in vertebrates and, 425
Bacteriophage
Z ring and, 97
Bacteriophage λ
choosing insertion site and, 440–41 prokaryotic poly(A) mRNA and, 182
Bacteriophage μ

choosing insertion site and, 452, 458–59
Bacteriophage M13 procoat protein
membrane phospholipid diversity and, 213
Bacteriophage T7
mtDNA maintenance in vertebrates and, 416
prokaryotic poly(A) mRNA and, 181–82
Baculovirus
O-linked glycosylation and, 326
Barstar
protein folding and, 556–57
Barwin
molybdenum-cofactor-containing enzymes and, 242
Base catalysis
and RNA and protein enzyme catalysis, 28–31
"Base-on" form
B_{12}-dependent enzymes and, 277
molybdenum-cofactor-containing enzymes and, 259
Basic phosphoprotein
O-linked glycosylation and, 326
"Beak" feature
and ribosomes and translation, 689
Bent DNA
choosing insertion site and, 447–48
Bi-cistronic mRNA
prokaryotic poly(A) mRNA and, 180
Bidirectional growth
Z ring and, 101, 104
Bilayers
lipid
G protein structures and, 668
membrane phospholipid diversity and, 200, 214, 216–17, 223–24, 226
protein import into mitochondria and, 867–72
Billiard ball model
protein folding and, 554
Binary fission
Z ring and, 94, 111
Binding change
ATP synthase and, 717
Binding sites
cell adhesion molecules and, 823
and RNA and protein enzyme catalysis, 33–34
Biochemistry
history of, 1
Biological clocks
transcriptional regulation by cAMP and, 807
Biomolecular substitution
at carbon
movement in biological systems and, 9
Biophysical methods
and ribosomes and translation, 679
Biosynthetic studies
D-amino acids and, 341–43
Biotin-avidin complex
force effects on kinetics and, 787
Biotin sulfoxide reductase
molybdenum-cofactor-containing enzymes and, 235
Biotinylation
subtractive cloning and, 766, 768, 774
Bipartite division inhibitor
Z ring and, 107
Bipartite structure
protein folding and, 559
Birefringent Congo red binding
and amyloid seeding in Alzheimer's disease and scrapie, 396, 398
Birth
PEPCK gene expression and, 581, 599, 601–2, 604–6
Bismolybdopterin
molybdenum-cofactor-containing enzymes and, 239
Bleomycin
mtDNA maintenance in vertebrates and, 427
Blocking
D-amino acids in animal peptides and, 341
replication protein A and, 75
and RNA and protein enzyme catalysis, 20
transcript elongation and, 117, 123–31, 136
Z ring and, 95, 105–6, 110
Blood fluke
O-linked glycosylation and, 327
B lymphocytes
subtractive cloning and, 759, 761
Bombina variegata
D-amino acids in animal peptides and, 340–41, 343
Bombinins H
D-amino acids in animal peptides and, 340–41
Bombyx mori
choosing insertion site and, 440
Bond breakage
force effects on kinetics and, 788
"Borrowing"
main chain
protein folding and, 551, 573
Bos taurus
replication protein A and, 64
Bovine papilloma virus
replication protein A and, 74
Brain
D-amino acids in animal peptides and, 339
and amyloid seeding in Alzheimer's disease and scrapie, 392, 401
Breakpoint-cluster-region homology
G protein structures and, 664
Brefeldin A
acyl-coenzyme A:cholesterol acyltransferase and, 632
Bridges
D-amino acids in animal peptides and, 342
molybdenum-cofactor-containing enzymes and, 250, 257
O-linked glycosylation and, 325–26
and RNA and protein enzyme catalysis, 41
Bronsted α and β values
movement in biological systems and, 12
Brown adipose tissue
PEPCK gene expression and, 606
Brownian motion
force effects on kinetics and, 800–2
Bubbles
single-stranded
replication protein A and, 74
transcription
transcript elongation and, 121–22
Budding
clathrin-coated vesicles and, 511, 529–30, 533–37
BUF1 protein
replication protein A and, 86
Bundled structures
Z ring and, 100
Burst kinetics
ATP synthase and, 744
protein folding and, 561–62

transcriptional regulation by cAMP and, 812

C

C1 set
cell adhesion molecules and, 825–28
C2 domain
and phospholipases C and D, 482–83
C2 set
cell adhesion molecules and, 825–28
Ca^{2+}
cell adhesion molecules and, 831–34, 848
clathrin-coated vesicles and, 531
G protein structures and, 653, 660
membrane phospholipid diversity and, 215, 223–26
movement in biological systems and, 15–17
transcript elongation and, 133
transcriptional regulation by cAMP and, 810–11
CAAT/enhancer binding protein
PEPCK gene expression and, 581, 586
Cadherins
molecular structure and, 823, 829–34
Caenorhabditis elegans
B_{12}-dependent enzymes and, 275
choosing insertion site and, 466
clathrin-coated vesicles and, 531
methionine synthase and, 291
O-linked glycosylation and, 328
protein import into mitochondria and, 885
replication protein A and, 64
Cage assembly
clathrin coated vesicles and, 518–19
Calcium ATPase
movement in biological systems and, 16
Calcium channels
voltage-sensitive
D-amino acids in animal peptides and, 341
Calcium pump
sarcoplasmic reticulum
movement in biological systems and, 15, 17
Candidate conformations
protein folding and, 549
Carbocation intermediate
movement in biological systems and, 10–11
Carbon
D-amino acids in animal peptides and, 338, 342
enforced bimolecular substitution at, 11–12
molybdenum-cofactor-containing enzymes and, 265
movement in biological systems and, 9–12
and RNA and protein enzyme catalysis, 23, 41, 43
Carbon-cobalt bond
B_{12}-dependent enzymes and, 269, 271, 301–2, 306–8
Carbonic anhydrase
protein folding and, 558
Carbon monoxide dehydrogenase
B_{12}-dependent enzymes and, 292–94
Carbon-skeleton mutases
B_{12}-dependent enzymes and, 272, 296–308
Carboxyl groups
movement in biological systems and, 13
Carboxylic acid
molybdenum-cofactor-containing enzymes and, 254
Carboxylic acid reductase
molybdenum-cofactor-containing enzymes and, 235
Carboxypeptidase
force effects on kinetics and, 789
Cardiolipin
membrane phospholipid diversity and, 199, 202, 208–16
Cargo recruitment
clathrin-coated vesicles and, 511, 538–43
Carnosine
D-amino acids in animal peptides and, 341
Carotenoids
movement in biological systems and, 5
Cascades
D-amino acids in animal peptides and, 343
Catalysis
ATP synthase and, 717–19, 721–22, 728–35, 737–41, 743–44
B_{12}-dependent enzymes and, 269, 278–79, 296–308
force effects on kinetics and, 796, 799
G protein structures and, 640, 663–65, 670, 673
movement in biological systems and, 1–18
O-linked glycosylation and, 315
and phospholipases C and D, 479–80, 483
and ribosomes and translation, 705–6
and RNA and protein enzymes, 19–54
"Catch"
force effects on kinetics and, 801
Catecholamines
PEPCK gene expression and, 600
Caulobacter crescenta
prokaryotic poly(A) mRNA and, 175
Caveolin
acyl-coenzyme A:cholesterol acyltransferase and, 632–33
Cavities
protein folding and, 552–53, 555
CBP protein
transcriptional regulation by cAMP and, 807, 819–20
ccm genes
B_{12}-dependent enzymes and, 275
CD2 protein
molecular structure and, 823, 853–57
CDC25 protein
G protein structures and, 670
cdh genes
B_{12}-dependent enzymes and, 275
CDP-diacylglycerol
membrane phospholipid diversity and, 202, 206–7, 217
C/EBP transcription factor
PEPCK gene expression and, 586, 589–90, 592–93, 595, 597, 602–4, 606
Cell adhesion molecules
adhesion complex, 832–36, 836–38
adhesion sites, 856–57
C1 set, 825–28
C2 set, 825–28
cadherins, 829–33
calcium-binding sites, 831

calcium regulation, 833
CD2 protein, 853–57
dimer formation, 832
evolution of Ig superfamily, 828–29
extracellular domains, 855
fibronectin, 838–39, 843, 845–47
heparin, 846–47
I adhesion site, 851
ICAMs, 851, 853
I domain, 850–51
IgSF domains, 828, 855–56
immunoglobulin superfamily domains, 823–29
integrins, 846–48, 850–51
I set, 825–28
metal and ligand binding site in α-subunits, 848, 850–51
NCAMs, 833–36
neurological disease-causing mutations, 839, 842–43
oligomerization and adhesive interactions, 840–42
perspectives and overview, 824–25
protein zero, 839–43
specificity of adhesion, 833
tenascin-C, 847
VCAM-1, 851–53
V set, 825–28
Cell culture
and amyloid seeding in Alzheimer's disease and scrapie, 405
Cell cycle
replication protein A and, 61, 66, 75, 83
transcript elongation and, 144–46
Z ring and, 95–97, 101, 105, 108
Cell division
bacterial
Z ring and, 93–114
membrane phospholipid diversity and, 227
Cell envelope
Z ring and, 109, 114
Cell-free assays
clathrin coated vesicles and, 511, 527–30
Cell functioning
force effects on kinetics and, 785–87, 794
phospholipase D and, 500–2
Cell localization
replication protein A and, 66
Cell migration
rapid
cell adhesion molecules and, 823
Cell proliferation
transcriptional regulation by cAMP and, 807
Cellular genes
transcript elongation and, 136, 144
Cell wall
Z ring and, 106, 110, 112
Cement gland
subtractive cloning and, 776
c-fms gene
transcript elongation and, 146
Chaperones
membrane phospholipid diversity and, 218–19, 221
protein import into mitochondria and, 863–74, 894, 897, 907
Chaperonins
protein import into mitochondria and, 895–96
Charcot-Marie-Tooth disease
protein zero and, 842
Checkpoint
eukaryotic
Z ring and, 106
Chelation
movement in biological systems and, 15
Chemical cross-linking
subtractive cloning and, 774
Chemiosmotic work
force effects on kinetics and, 796–802
Chemistry
history of, 1
Chimeras
and amyloid seeding in Alzheimer's disease and scrapie, 402
G protein structures and, 657, 667
PEPCK gene expression and, 589, 592, 594, 604
Chinese hamster ovary (CHO) cells
acyl-coenzyme A:cholesterol acyltransferase and, 618, 623, 627, 629, 631
"Chips"
analyzing whole genome on subtractive cloning and, 779–80
Chiral centers
D-amino acids in animal peptides and, 338
molybdenum-cofactor-containing enzymes and, 237, 247
Chloramphenicol
mtDNA maintenance in vertebrates and, 429
Z ring and, 97
Chloramphenicol acetyltransferase
PEPCK gene expression and, 592, 594
Chloroplasts
ATP synthase and, 722, 736, 740
prokaryotic poly(A) mRNA and, 182, 191–93
Z ring and, 94, 113
CHO1/PSS gene
membrane phospholipid diversity and, 207
Cholera toxin
G protein structures and, 661
Cholesterol
acyl-coenzyme A:cholesterol acyltransferase and, 613, 615–16, 621, 624–30, 632–33
membrane phospholipid diversity and, 227
Cholesterol-cholesteryl ester cycle
acyl-coenzyme A:cholesterol acyltransferase and, 631–32
Cholesteryl esterase
acyl-coenzyme A:cholesterol acyltransferase and, 628
Cholesteryl esters
lipoprotein-bound
acyl-coenzyme A:cholesterol acyltransferase and, 613–16, 622, 627–31
Chromatin
choosing insertion site and, 451–52
PEPCK gene expression and, 600–1
transcript elongation and, 129, 140, 154
Chromatin-associated proteins
O-linked glycosylation and, 321–22
Chromosome 1
and amyloid seeding in Alzheimer's disease and scrapie, 396
Chromosome 1q25
acyl-coenzyme A:cholesterol acyltransferase and, 622
Chromosome 14
and amyloid seeding in Alzheimer's disease and scrapie, 396
Chromosome 21
and amyloid seeding in

Alzheimer's disease and scrapie, 396
Chromosomes
choosing insertion site and, 448–50
force effects on kinetics and, 785–86
prokaryotic poly(A) mRNA and, 180, 194
replication protein A and, 66, 75, 77
Z ring and, 97, 110
Chylomicron
lipoprotein complex acyl-coenzyme A:cholesterol acyltransferase and, 615
Chymotrypsin
movement in biological systems and, 8
Cibacron Blue columns
replication protein A and, 63
Circular dichroism
and amyloid seeding in Alzheimer's disease and scrapie, 388
protein folding and, 557, 559, 561
Circularization
of linear viral genome herpes simplex virus DNA replication and, 347
cis-platin
mtDNA maintenance in vertebrates and, 427
replication protein A and, 73
cis-regulatory elements
PEPCK gene expression and, 587–89, 593
cis-site/*trans*-site model
protein import into mitochondria and, 883
cis-vaccenic acid
membrane phospholipid diversity and, 203
Classification
cell adhesion molecules and, 823
protein folding and, 564–66
Clathrin coated vesicles
budding from trans-Golgi network
in vitro assays for coat assembly, 535–36
uncoating reaction, 537–38
vacuolar sorting in yeast, 536–37
cargo recruitment mechanisms
agonist-induced sequestration of G-protein-coupled receptors, 542–43
auxiliary sorting factors required for ligand-induced endocytosis, 540–43
most constitutively internalized receptors carry tyrosine- containing sorting motifs, 538–40
receptor-tyrosine kinases, 541–42
formation and protein sorting
clathrin and adaptor protein complexes coassemble to form coat, 513–16
constituents of clathrin coat, 513–16
introduction, 512–13
mechanism of formation of clathrin-coated endocytic vesicles
coated pit constriction, 533–34
dynamin, 534–35
GTPases, 534–35
initiation of coated pit assembly, 530–32
invagination of coated pits, 532–33
recruitment, 532
vesicle budding, 533–35
perspectives, 543
structure and function of clathrin, 516–17
adaptor proteins, 519–25
adaptor protein-2 complexes, 525
assembly protein 180, 526
budding of coated vesicles, 529–30
cage assembly, 518–19
cell-free assays, 527–30
clathrin binding, 521–23
clathrin-coated pits, 527–29
coat assembly, 521–23
inositol polyphosphates, 525
membrane binding, 523–24
neuron-specific assembly protein, 526
sorting signal recognition, 524–25
structural issues, 526–27
triskelion assembly, 517–18
Cleavage
and amyloid seeding in Alzheimer's disease and scrapie, 401
B_{12}-dependent enzymes and, 272, 296, 301–2, 306, 309
herpes simplex virus DNA replication and, 347, 351–52
molybdenum-cofactor-containing enzymes and, 255
mtDNA maintenance in vertebrates and, 416
prokaryotic poly(A) mRNA and, 177, 180, 182, 187, 189, 191
protein import into mitochondria and, 902–6
replication protein A and, 80
and RNA and protein enzyme catalysis, 20, 28, 35, 44, 48
transcript elongation and, 120, 131–33
Clindamycin
and ribosomes and translation, 708
Cloning
acyl-coenzyme A:cholesterol acyltransferase and, 618–21
D-amino acids in animal peptides and, 337, 339
prokaryotic poly(A) mRNA and, 178, 181
subtractive, 751–80
Z ring and, 113
Close-packing
protein folding and, 551, 554–55, 573–74
Clostridium barkerii
B_{12}-dependent enzymes and, 275
Clostridium botulinum
phospholipase D and, 495
Clostridium butyricum
membrane phospholipid diversity and, 224
Clostridium cochlearium
glutamate mutase and, 275, 299–300
Clostridium difficile
phospholipase D and, 495
Clostridium tetanomorphum
glutamate mutase and, 275, 299
Clostridium thermoaceticum
methyltransferases and, 275, 282, 292, 294
Cloverleaf secondary structures
mtDNA maintenance in vertebrates and, 420
Co^{2+}
transcript elongation and, 133
Coactivators
signal-dependent transcriptional regulation by cAMP and, 807, 817–18
Coassembly
clathrin-coated vesicle formation and, 513–16

Coat assembly
clathrin-coated vesicles and, 511, 535–36
Cobalamin
see Vitamin B_{12}
Cobalamin-binding fragment
methionine synthase and, 283–86
Cobalt bonds
B_{12}-dependent enzymes and, 269, 271, 276, 284, 286, 301–2, 306–9
Cobamide
B_{12}-dependent enzymes and, 269, 271–72, 276, 291–95
Cobinamide
B_{12}-dependent enzymes and, 278, 294
codBA operon
transcript elongation and, 135
Coding regions
prokaryotic poly(A) mRNA and, 173, 178, 182, 192
transcript elongation and, 124
Codons
D-amino acids in animal peptides and, 337
Coenzyme A (CoA)
movement in biological systems and, 5–6
Coenzyme M
B_{12}-dependent enzymes and, 269, 275, 292, 294–95
Cofactors
B_{12}-dependent enzymes and, 269, 276–78
molybdenum enzymes and, 233–65
phospholipase D and, 493
and RNA and protein enzyme catalysis, 32–33, 45
Cognate proteins
G protein structures and, 639
Cohesive restriction sites
subtractive cloning and, 770–72
Coiled-coiled structures
protein folding and, 567
Cointegrate
choosing insertion site and, 444
ColE1 plasmid
mtDNA maintenance in vertebrates and, 416
prokaryotic poly(A) mRNA and, 183, 189
Collapse models
G protein structures and, 657, 673
protein folding and, 557, 559–60, 562
Collisions
subtractive cloning and, 754
Combinatorial packing
protein folding and, 549, 562, 567
CoM methyltransferases
B_{12}-dependent enzymes and, 272
Compacting force
protein folding and, 570
Compartmentalization
and amyloid seeding in Alzheimer's disease and scrapie, 403
Complexity
subtractive cloning and, 754
Concatemers
herpes simplex virus DNA replication and, 347
Conditional null mutants
Z ring and, 95
Conformational flexibility
ATP synthase and, 738–40
and RNA and protein enzyme catalysis, 43
Conformational space
protein folding and, 568–69, 571
Congo red
and amyloid seeding in Alzheimer's disease and scrapie, 398
Consensus elements
prokaryotic poly(A) mRNA and, 173, 194
Consensus sequences
choosing insertion site and, 445–47
Conserved structures
and RNA and protein enzyme catalysis, 19
Constitutively internalized receptors
clathrin-coated vesicles and, 538–40
Constriction
coated pit
clathrin-coated vesicles and, 533–34
Contractility
Z ring and, 93–94, 113
Conus radiatus
D-amino acids in animal peptides and, 341
Copy DNA (cDNA)
acyl-coenzyme A:cholesterol acyltransferase and, 618–21
D-amino acids in animal peptides and, 337, 339, 341
membrane phospholipid diversity and, 206–7
mtDNA maintenance in vertebrates and, 414
phospholipase D, 502
prokaryotic poly(A) mRNA and, 173, 176, 192
replication protein A and, 67
subtractive cloning and, 751–52, 756, 759–60, 763–64, 769, 772, 777–80
Z ring and, 113
Core
protein
protein folding and, 553, 562
Corrin
B_{12}-dependent enzymes and, 271, 276, 284–85, 288, 305, 307–8
Corrinoid
B_{12}-dependent enzymes and, 269, 272, 275, 292–95, 309
Cot analysis
subtractive cloning and, 754, 756, 760–62, 765
Cotranslational protein import
mitochondria and, 875–76
Coulomb's law
and RNA and protein enzyme catalysis, 33
Covalent bonds
molybdenum-cofactor-containing enzymes and, 253
movement in biological systems and, 1, 13
and RNA and protein enzyme catalysis, 40, 45, 47
Covalent catalysis
and RNA and protein enzyme catalysis, 31–32
CpG islands
subtractive cloning and, 762
p-Cresolyl cobamide
B_{12}-dependent enzymes and, 291
CRE-1 protein
PEPCK gene expression and, 592
CREB protein
PEPCK gene expression and, 590, 606
transcriptional regulation by cAMP and, 807–12, 814–18, 820–21
CREM protein
PEPCK gene expression and, 606
Creutzfeldt-Jacob disease
and amyloid seeding in Alzheimer's disease and scrapie, 399–400
Crithidia fasciculata

replication protein A and, 64, 66, 68
Crossbridge model
force effects on kinetics and, 795
Cross-coupling
transcriptional regulation by cAMP and, 818–19
Cross-hybridization
subtractive cloning and, 754
Cross-linking
ATP synthase and, 741
chemical
subtractive cloning and, 766–69, 774
replication protein A and, 70
and ribosomes and translation, 693, 695, 700, 712
and RNA and protein enzyme catalysis, 53
Z ring and, 99
Crossover
protein folding and, 571
crp transcript
prokaryotic poly(A) mRNA and, 179
Crustaceans
D-amino acids in animal peptides and, 337, 341
Crustocyanin
movement in biological systems and, 5
Cryoelectron microscopy
ATP synthase and, 720, 741
and ribosomes and translation, 680
Crystallization
and amyloid seeding in Alzheimer's disease and scrapie, 395
Crystal poisons
and amyloid seeding in Alzheimer's disease and scrapie, 399
CS1 small ribosomal protein
prokaryotic poly(A) mRNA and, 193
CSB proteins
mtDNA maintenance in vertebrates and, 413, 415, 417–19, 425–26
CT 60 cells
acyl-coenzyme A:cholesterol acyltransferase and, 629
Cyanide
B_{12}-dependent enzymes and, 271
molybdenum-cofactor-containing enzymes and, 240, 250
Cyanobacteria
prokaryotic poly(A) mRNA and, 175, 185
Cybrid fusion
mtDNA maintenance in vertebrates and, 429
Cyclic adenosine monophosphate (cAMP)
PEPCK gene expression and, 581, 586, 589–95, 599–600, 604–5
transcriptional regulation by attenuation phase, 812–13
burst phase, 812
CBP associates with RNA polymerase II, 819–20
components of cAMP response unit, 808–10
CREB protein, 810–11, 814–18
cross-coupling between signaling pathways, 818–19
glutamine-rich activator Q2, 816
kinase-inducible domain, 815–16
protein kinase A, 814–16
refractory period, 813–14
signal-dependent coactivator, 817–18
stimulus intensity, 811–12
Tax protein, 814
transactivation, 814–16
transcriptional induction, 812–14
Cyclic AMP receptor protein
prokaryotic poly(A) mRNA and, 179
Cyclin
replication protein A and, 66
Cyclin-dependent kinases
replication protein A and, 85
Cysteine
D-amino acids in animal peptides and, 338
ATP synthase and, 723, 740–42
B_{12}-dependent enzymes and, 287
cell adhesion molecules and, 839, 843, 848
G protein structures and, 645, 650, 657, 669
membrane phospholipid diversity and, 204
molybdenum-cofactor-containing enzymes and, 253, 255–57, 263
mtDNA maintenance in vertebrates and, 422
protein folding and, 556
and RNA and protein enzyme catalysis, 20, 32, 53
cysZ gene
prokaryotic poly(A) mRNA and, 181
Cytidine
and RNA and protein enzyme catalysis, 32
Cytidylate
prokaryotic poly(A) mRNA and, 192
Cytochrome b_5
molybdenum-cofactor-containing enzymes and, 255
Cytochrome *c*
protein folding and, 559–61
protein import into mitochondria and, 900, 902
Cytochrome heme lyases
protein import into mitochondria and, 899
Cytochrome P450
membrane phospholipid diversity and, 226
Cytochromes
molybdenum-cofactor-containing enzymes and, 247, 249
Cytokinesis
Z ring and, 93–94, 113
Cytomegalovirus (CMV)
O-linked glycosylation and, 326
Cytoplasm
acyl-coenzyme A:cholesterol acyltransferase and, 614–15
movement in biological systems and, 15, 17
prokaryotic poly(A) mRNA and, 174
replication protein A and, 66
Cytoplasmic dynein ATPases
force effects on kinetics and, 802–3
Cytoplasmic membrane
Z ring and, 94, 102, 104, 106, 111–12
Cytosine
molybdenum-cofactor-containing enzymes and, 253
mtDNA maintenance in vertebrates and, 426
Cytosine monophosphate (CTP)
molybdenum-cofactor-containing enzymes and, 237
Cytoskeletal bridging proteins

O-linked glycosylation and, 325–26
Cytoskeletal matrix concentration
force effects on kinetics and, 785, 788–89, 793
Cytoskeletal proteins
dynamic *O*–linked glycosylation and, 315–31
Cytoskeleton
Z ring and, 113
Cytosol
PEPCK gene expression and, 582, 584
protein import into mitochondria and, 863, 872–78
Cytosolic factors
protein import into mitochondria and, 863–75

D

Damaged DNA
replication protein A and, 73–74, 80
Daughter cells
Z ring and, 94, 113
D-binding protein
PEPCK gene expression and, 603, 607
DBP transcription factor
PEPCK gene expression and, 590
DEAD-box proteins
prokaryotic poly(A) mRNA and, 189
Dead end elimination
protein folding and, 565
DEAE dextran
Z ring and, 100–1
Decarboxylation
and RNA and protein enzyme catalysis, 53
Decoding
mRNA
and ribosomes and translation, 679
Decoy folds
protein folding and, 569–72, 574
Defects
protein folding and, 553
Def gene
membrane phospholipid diversity and, 210
Defined structural motif
and RNA and protein enzyme catalysis, 50–51
Degradation products
prokaryotic poly(A) mRNA and, 173
Degradosome complex
prokaryotic poly(A) mRNA and, 189
Dehydroalanine
D-amino acids in animal peptides and, 339
Dejerine Sottas syndrome
protein zero and, 842
Deletion analysis
replication protein A and, 83
Deletion mutants
PEPCK gene expression and, 603
prokaryotic poly(A) mRNA and, 183
replication protein A and, 73
DELSEED sequence
ATP synthase and, 737, 740
Delta-opiate receptors
D-amino acids in animal peptides and, 339
Deltorphins
D-amino acids in animal peptides and, 339–40, 344
Denaturation
protein folding and, 558–60, 562
subtractive cloning and, 755
Deoxyadenylate residues
prokaryotic poly(A) mRNA and, 176
Deoxycholate
acyl-coenzyme A:cholesterol acyltransferase and, 617
Deoxyuridine triphosphatase
herpes simplex virus DNA replication and, 347, 373–74
Dephosphorylation
subtractive cloning and, 771
[^{14}] Dequalinium
ATP synthase and, 740
Dermenkephalin
D-amino acids in animal peptides and, 339
Dermorphin
D-amino acids in animal peptides and, 339, 340–41, 343–44
Desolvation
movement in biological systems and, 14
Destabilization
movement in biological systems and, 1
prokaryotic poly(A) mRNA and, 194
replication protein A and, 76
and RNA and protein enzyme catalysis, 35, 37–39, 41–43, 54
Desulfovibrio gigas aldehyde oxidoreductase
molybdenum-cofactor-containing enzymes and, 234, 236–37, 240, 247, 249–51, 257, 259
Detergents
acyl-coenzyme A:cholesterol acyltransferase and, 617, 626
membrane phospholipid diversity and, 221
Development
PEPCK gene expression and, 581
transcript elongation and, 146
Dextran
Z ring and, 100–1
DGDG
membrane phospholipid diversity and, 223–24
dgk gene
membrane phospholipid diversity and, 204
Diabetes
PEPCK gene expression and, 594–96
Diacylglycerol
membrane phospholipid diversity and, 202, 204, 206–7, 217, 223
Diagonal reaction coordinate
movement in biological systems and, 13
Diaziridinyl-1,4-benzoquinone
subtractive cloning and, 768
Dictyostelium discoideum
protein import into mitochondria and, 901
Dicyclohexylcarbodiimide (DCCD)
ATP synthase and, 718, 735–36, 741–43
Dideoxycytosine
mtDNA maintenance in vertebrates and, 424
Dideoxynucleoside triphosphates
mtDNA maintenance in vertebrates and, 420
Dielectric
local
and RNA and protein enzyme catalysis, 34
Dietary signals
PEPCK gene expression and, 581, 589
Differential display
subtractive cloning and, 776, 778

Differential gene representation
subtractive cloning and, 751, 759–60, 773–75
Differential screening
subtractive cloning and, 776, 778
Differentiation
transcript elongation and, 146
Diffusion
and amyloid seeding in Alzheimer's disease and scrapie, 398
force effects on kinetics and, 793, 800
movement in biological systems and, 10–11
and RNA and protein enzyme catalysis, 22
Diffusional ratchet
force effects on kinetics and, 789
Digestion
movement in biological systems and, 17
Dihydrofolate reductase
protein folding and, 561
Dihydropterin
molybdenum-cofactor-containing enzymes and, 239
Dimerization
and amyloid seeding in Alzheimer's disease and scrapie, 394
B_{12}-dependent enzymes and, 295
cell adhesion molecules and, 832
force effects on kinetics and, 803
G protein structures and, 647, 665
molybdenum-cofactor-containing enzymes and, 260
mtDNA maintenance in vertebrates and, 427
replication protein A and, 67
Z ring and, 99
Dimethylbenzimidazole
B_{12}-dependent enzymes and, 269, 271, 273–74, 278, 283–85, 291, 304, 309
Dimethylsulfoxide (DMSO) reductase family
molybdenum-cofactor-containing enzymes and, 234–49, 255, 259, 262–64
Diol dehydratase
B_{12}-dependent enzymes and, 272, 274, 291, 301, 307
2,3-Diphosphoglycerate (DPG)
force effects on kinetics and, 794
Diplococcus pneumoniae
O-linked glycosylation and, 328
Direct sequencing
subtractive cloning and, 779
Direct unwinding
dsDNA
replication protein A and, 76–77
Disaccharides
membrane phospholipid diversity and, 202
Discontinuous mode of synthesis
transcript elongation and, 117
Discrete-state models and energy functions
protein folding and, 569–70
Disporic mutants
Z ring and, 110
Dissection
B_{12}-dependent enzymes and, 281–83
Dissociation
cell adhesion molecules and, 823
movement in biological systems and, 12
transcript elongation and, 117
Distal pausing
transcript elongation and, 117
Distal promoter
acyl-coenzyme A:cholesterol acyltransferase and, 622
Distortion
movement in biological systems and, 14
Disulfide bonds
cell adhesion molecules and, 843, 848
molybdenum-cofactor-containing enzymes and, 254
protein folding and, 559
Disulfide isomerase
acyl-coenzyme A:cholesterol acyltransferase and, 623
Dithiolene groups
molybdenum-cofactor-containing enzymes and, 237, 246, 251, 253, 255, 257, 262
Divalency
and RNA and protein enzyme catalysis, 26
transcript elongation and, 133
Divergence
prokaryotic poly(A) mRNA and, 194
Diversity
choosing insertion site and, 437
membrane phospholipids and, 199–228
prokaryotic poly(A) mRNA and, 173
and RNA and protein enzyme catalysis, 20, 39, 44
transcriptional regulation by cAMP and, 807
Z ring and, 109
Division inhibitors
Z ring and, 95–96
Division site
Z ring and, 96, 102, 105–7, 108
D-loop
mtDNA maintenance in vertebrates and, 411–12, 414–15, 417–22, 425–26
dnaA mutant
membrane phospholipid diversity and, 208, 211
Z ring and, 106
DNA-binding domain
replication protein A and, 69, 71–72, 82
DNA-binding protein
single-stranded
herpes simplex virus replication and, 347, 359–62
mtDNA maintenance in vertebrates and, 421
DNA breakage
choosing insertion site and, 441–65
DNA-dependent protein kinase
replication protein A and, 61, 80, 85–87
DNA helicases
herpes simplex virus DNA replication and, 347, 362–64
DNA joining
choosing insertion site and, 441–60
dnaK mutant
prokaryotic poly(A) mRNA and, 189
Z ring and, 97, 104
DNA ligase I
herpes simplex virus DNA replication and, 347
DNA metabolism
replication protein A and, 61, 75, 86, 88
transcript elongation and, 144–46
DNA polymerases
herpes simplex virus DNA replication and, 347, 364–68

membrane phospholipid diversity and, 211
mtDNA maintenance in vertebrates and, 416, 420–21, 430
replication protein A and, 74–79, 82–83
and RNA and protein enzyme catalysis, 41
subtractive cloning and, 768, 772
transcript elongation and, 121
DNA primases
herpes simplex virus DNA replication and, 347, 362–64
mtDNA maintenance in vertebrates and, 422
replication protein A and, 76, 78
DNA recombination
replication protein A and, 72, 85
DNA repair
mtDNA maintenance in vertebrates and, 426–28
replication protein A and, 61, 72, 79–80, 85
DNA replication
herpes simplex virus and, 347–78
membrane phospholipid diversity and, 209–11
mtDNA maintenance in vertebrates and, 409–30
replication protein A and, 61, 66, 68, 72, 74–75, 77–79, 82–85
Z ring and, 95, 106
DNase I
hypersensitive regions
PEPCK gene expression and, 601–2
and RNA and protein enzyme catalysis, 41
subtractive cloning and, 769
Docking
G protein structures and, 667
protein folding and, 552, 554
and RNA and protein enzyme catalysis, 37, 48
Domain-domain interfaces
protein folding and, 555
DOPE
membrane phospholipid diversity and, 227
Dot blot analysis
subtractive cloning and, 773
Double mutants
Z ring and, 110
Double-stranded DNA (dsDNA)
replication protein A and, 68, 73–77
subtractive cloning and, 759, 764, 770
Down's syndrome
and amyloid seeding in Alzheimer's disease and scrapie, 386, 402
DPPC
membrane phospholipid diversity and, 227
Drag
force effects on kinetics and, 800–1
Driver excess hybridization
subtractive cloning and, 752–53, 756
Drivers
subtractive cloning and, 752–53, 758, 760, 763–65, 767–69, 771, 774, 777
Driver-tracer hybrids
subtractive cloning and, 752–53, 765
Drosophila melanogaster
cell adhesion molecules and, 839
choosing insertion site and, 438–40, 455–57
clathrin-coated vesicles and, 531
membrane phospholipid diversity and, 207
mtDNA maintenance in vertebrates and, 421
O-linked glycosylation and, 318
PEPCK gene expression and, 583
protein import into mitochondria and, 885
replication protein A and, 64
transcript elongation and, 124, 136, 140, 146, 150, 152, 157
"Drowsy" mice
and amyloid seeding in Alzheimer's disease and scrapie, 402
Duchenne muscular dystrophy
subtractive cloning and, 777
Duplex formation
and RNA and protein enzyme catalysis, 22, 27, 37–38, 44, 52
subtractive cloning and, 765
Dynamin
clathrin-coated vesicles and, 534–35
membrane phospholipid diversity and, 211
Dynein
ATP synthase and, 744
Dynein ATPases
force effects on kinetics and, 802–3

E

EBNA1 protein
replication protein A and, 74, 76
EDTA
G protein structures and, 665
and ribosomes and translation, 695, 700
Effective concentration
and RNA and protein enzyme catalysis, 40
Effective dielectric
and RNA and protein enzyme catalysis, 33
Effectors
G protein structures and, 639–40, 646–47, 653–59, 657, 664
and RNA and protein enzyme catalysis, 45
EF-G
G protein structures and, 641, 648, 652, 659
and ribosomes and translation, 680
EF-Ts
G protein structures and, 639, 672
EF-Tu
G protein structures and, 641, 643, 645, 647–48, 651, 654–57, 659, 662–63, 670
and ribosomes and translation, 680
EGTA
movement in biological systems and, 15
Eicosapentaenoic acid
acyl-coenzyme A:cholesterol acyltransferase and, 633
Electron crystallography
ATP synthase and, 720
Electron microscopy
and amyloid seeding in Alzheimer's disease and scrapie, 388, 396–99
ATP synthase and, 718–19
replication protein A and, 70
and ribosomes and translation, 688–91
Z ring and, 100
Electron paramagnetic resonance (EPR) spectroscopy
B_{12}-dependent enzymes and, 273, 276–77, 291–92, 294, 296, 299–301
molybdenum-cofactor-

containing enzymes and, 247, 257
Electron transfer
B_{12}-dependent enzymes and, 276
molybdenum-cofactor-containing enzymes and, 233, 236–37, 241, 248–49, 253–54
and RNA and protein enzyme catalysis, 41
Electron-withdrawing substituents
movement in biological systems and, 12, 25
Electrostatics
protein folding and, 564
and RNA and protein enzyme catalysis, 22
ELL protein
transcript elongation and, 124
Elongation
replication protein A and, 79
transcript, 117–64
Z ring and, 103
Elongation factors
G protein structures and, 639, 641, 643, 645, 647–48, 651–57, 659, 662–63, 670, 672–73
and ribosomes and translation, 683–84
Elongin
transcript elongation and, 124
Embryogenesis
replication protein A and, 84
Endgame
protein folding and, 549–74
Endocytic membrane recycling
acyl-coenzyme A:cholesterol acyltransferase and, 627–28, 630
Endocytosis
clathrin-coated vesicles and, 511, 530–35, 540–43
Endoglucanase V
molybdenum-cofactor-containing enzymes and, 242
Endonucleolytic processing
prokaryotic poly(A) mRNA and, 173, 177, 179
Endoplasmic reticulum (ER)
acyl-coenzyme A:cholesterol acyltransferase and, 613, 616–17, 623, 626–34
Endoribonuclease
mtDNA maintenance in vertebrates and, 416
Endosomes
acyl-coenzyme A:cholesterol acyltransferase and, 628–29
Endosymbionts
prokaryotic poly(A) mRNA and, 190
Energetics
protein import into mitochondria and, 863, 883–84, 890–91
Energy landscape
protein folding and, 558, 569, 571
Energy minimization
protein folding and, 570–71
Enforced bimolecular substitution at carbon
movement in biological systems and, 11–12
Enforced concerted mechanism
movement in biological systems and, 1
Enolase
prokaryotic poly(A) mRNA and, 189
Enrichment
subtractive cloning and, 773–74
Entamoeba histolytica
O-linked glycosylation and, 327
Enthalpy
force effects on kinetics and, 787
Entropy
G protein structures and, 658
movement in biological systems and, 1, 13–14
and RNA and protein enzyme catalysis, 35, 37, 40
Envelopes
protein folding and, 551–53
Environment
protein folding and, 567
and RNA and protein enzyme catalysis, 33–35
Enzymatic catalysis
catalytic strategies of RNA and protein enzymes, 24–25
allosteric RNA enzyme, 48
cofactors, 32–33
comparisons of ability of RNA and protein enzymes to carry out complex functions, 45–49
covalent catalysis, 31–32
determining factors in selections, 51–52
general acid and base catalysis vs metal ion catalysis, 25–31
general base catalysis by $MG(OH)^+$, 27–28
ground-state destabilization within RNA active site, 41–43
group I intron self-splicing, 45–47
hammerhead ribozyme, 35–37
intrinsic binding energy for catalysis by both RNA and protein enzymes, 34–43
metal ions in ribozyme catalysis, 29–31
metal ions in RNA catalysis, 28–29
number of molecules in pool, 50
perspective, 54
phosphoryl transfer reactions, 29–30
positioning substrates within RNA active site, 39–40
processivity of RNA enzyme, 48
repertoire of RNA catalysis, 52–54
rigidity, 43–45
RNA manipulation of binding site environment to facilitate catalysis, 33–34
RNA perturbation of pK_a to optimize general acid-base catalysis, 30
selections of RNA and protein catalysts, 49–54
selection type, 50
starting from random pool vs defined structural motif, 50–51
Tetrahymena group I ribozyme, 25–27, 37–43
type of reaction catalyzed, 51
worth of RNA catalyst, 52–54
mechanistic questions raised by RNA enzyme discovery, 20–22
comparisons of catalytic strategies of RNA and protein enzymes, 24–25
extensiveness of repertoire of reactions catalyzed by RNA, 23–24
RNA as true catalyst, 22
structural features of RNA molecule which confer catalysis, 24
worth of RNA as catalyst, 22–23
movement in biological systems and, 1–19
Enzymatic hybrid removal

subtractive cloning and, 767, 769
Enzymes
ATP synthase and, 717–44
B_{12}-dependent, 269–309
force effects on kinetics and, 785–94, 804
herpes simplex virus DNA replication and, 347, 372–75
membrane phospholipid diversity and, 203, 206
molybdenum-cofactor-containing, 233–65
movement in biological systems and, 1, 5, 13–15, 17
mtDNA maintenance in vertebrates and, 427, 429–30
O-linked glycosylation and, 327–29
PEPCK gene expression and, 581
phospholipase D and, 498–500
protein folding and, 552, 573
replication protein A and, 77
and RNA and protein enzyme catalysis, 19–54
subtractive cloning and, 764, 769–70, 772–73
transcript elongation and, 117
Enzymology
acyl-coenzyme A:cholesterol acyltransferase and, 617–18
Epidermin
D-amino acids in animal peptides and, 338
Epstein-Barr virus (EBV)
replication protein A and, 74
Equilibrium binding
D-amino acids in animal peptides and, 342
and amyloid seeding in Alzheimer's disease and scrapie, 388–90, 393
protein folding and, 558–62
replication protein A and, 70, 73
ERCC1/XPF protein
replication protein A and, 75, 80
Erythromycin
and ribosomes and translation, 706
Escherichia coli
ATP synthase and, 718, 720, 722–23, 725–27, 735–36, 738–39, 742
G protein structures and, 641, 647
membrane phospholipid diversity and, 199–12, 216, 218–19, 221, 224–25, 228
methionine synthase and, 273, 275, 291
molybdenum-cofactor-containing enzymes and, 241–42, 244
mtDNA maintenance in vertebrates and, 421
O-linked glycosylation and, 328
PEPCK gene expression and, 583
phospholipase D and, 499
prokaryotic poly(A) mRNA and, 173–84, 186–90, 192–94
protein import into mitochondria and, 872
replication protein A and, 63, 65, 67, 80–81
and ribosomes and translation, 682, 691, 704, 706–7, 709, 711–12
transcript elongation and, 119, 122, 124–28, 130–35, 137–39, 141–45, 148–50, 152, 157, 159–62
Z ring and, 94–95, 97–101, 104, 107, 109, 111–13
Ester bonds
movement in biological systems and, 8
Ethanolamine-ammonia lyase
B_{12}-dependent enzymes and, 272, 274, 291, 301, 307
N-Ethylmaleimide
D-amino acids in animal peptides and, 342
mtDNA maintenance in vertebrates and, 420
Eubacteria
Z ring and, 94, 112–13
Eukaryotes
DNA metabolism
replication protein A and, 61–88
membrane phospholipid diversity and, 205–7, 214–16, 228
molybdenum-cofactor-containing enzymes and, 255
O-linked glycosylation and, 315, 331
phosphatidylinositol-specific phospholipases and, 475–502
prokaryotic poly(A) mRNA and, 173, 182, 190–93
transcript elongation and, 117, 128–29, 136
Z ring and, 93, 106, 112–13
Evolution
cell adhesion molecules and, 828–29
G protein structures and, 639–40
PEPCK gene expression and, 584
prokaryotic poly(A) mRNA and, 194
and RNA and protein enzyme catalysis, 49, 54
Z ring and, 93
Excision reactions
replication protein A and, 80
and RNA and protein enzyme catalysis, 20
Exocyclic amino group
and RNA and protein enzyme catalysis, 27
Exons
and RNA and protein enzyme catalysis, 47
3′-Exonucleases
prokaryotic poly(A) mRNA and, 177–79, 186–90
subtractive cloning and, 773
3′-5′-Exonuclease
mtDNA maintenance in vertebrates and, 421
replication protein A and, 77
and RNA and protein enzyme catalysis, 41
3′-Exoribonucleases
prokaryotic poly(A) mRNA and, 184
Extended X-ray absorption fine structure spectroscopy (EXAFS)
molybdenum-cofactor-containing enzymes and, 247, 250, 256–57
Extracellular domains
cell adhesion molecules and, 855–56
protein zero and, 840
Extrinsic blocks
transcript elongation and, 129–31

F

F_0F_1-ATPases
force effects on kinetics and, 785, 796–800, 802, 804
F_1-ATPase
ATP synthase and, 718–33, 742–43
Factor B promoter
transcript elongation and, 151

FAD
molybdenum-cofactor-containing enzymes and, 251
and RNA and protein enzyme catalysis, 32
Fasting
PEPCK gene expression and, 598
Fatty acids
acyl-coenzyme A:cholesterol acyltransferase and, 614, 618–19, 633–34
membrane phospholipid diversity and, 203, 205, 208, 216, 222–25
movement in biological systems and, 5
PEPCK gene expression and, 598
and RNA and protein enzyme catalysis, 45
Feasibility analysis
subtractive cloning and, 780
Fe-EDTA
and ribosomes and translation, 695, 700
FEN1 nuclease
replication protein A and, 79
Ferredoxin
B_{12}-dependent enzymes and, 288
molybdenum-cofactor-containing enzymes and, 250, 263
FFA-1 protein
replication protein A and, 66, 74
Fibrils
preformed
and amyloid seeding in Alzheimer's disease and scrapie, 385–93, 395–99, 404
Fibroblasts
acyl-coenzyme A:cholesterol acyltransferase and, 615, 621, 623, 629
force effects on kinetics and, 787
Fibronectin
molecular structure and, 823, 838–39, 843–47
Filamentation
force effects on kinetics and, 789–90, 792–93, 801
prokaryotic poly(A) mRNA and, 175
Z ring and, 93, 95, 100–1, 106–7, 111
Fission
Z ring and, 94, 111, 113
Flagellar motor
bacterial
force effects on kinetics and, 785, 796–802, 804
Flavins
molybdenum-cofactor-containing enzymes and, 264
Flavodoxin
B_{12}-dependent enzymes and, 288
protein folding and, 563
Flexibility
protein folding and, 555, 567, 573
Floppy enzymes
and RNA and protein enzyme catalysis, 43
Fluorescence
replication protein A and, 69
Fluorescence recovery after photobleaching (FRAP)
force effects on kinetics and, 802
Foam cells
acyl-coenzyme A:cholesterol acyltransferase and, 622
Folate
and RNA and protein enzyme catalysis, 32
Folding pathways
protein folding and, 557–58
Footprinting
and ribosomes and translation, 680, 694, 700
transcript elongation and, 127, 159–60
Force effects
on biochemical kinetics
chemiosmotic work, 796–802
cytoplasmic dynein ATPases, 802–3
enzymatic activity alteration, 788–94
enzyme kinetics, 786–87
generation of forces in cells, 786–87
ion transport, 799–802
kinesin dynein ATPases, 802–3
macromolecular mechanisms of force regulation, 789–94
molecular level force measurements, 787
molecular level force transduction, 793
motor proteins, 794–804
myosin ATPase, 795–96
polymer concentration, 792–93
polymer dynamics, 789–90, 792
protein domain movements, 794
protein-ligand bond dynamics, 787–88
protein-protein bond dynamics, 787–88
torque generation, 798–99
Forespore compartment
Z ring and, 110
Formaldehyde ferredoxin oxidoreductase
molybdenum-cofactor-containing enzymes and, 235
Formamidopyridine
mtDNA maintenance in vertebrates and, 426
Formate dehydrogenase
molybdenum-cofactor-containing enzymes and, 235, 241–42, 244, 264
N-Formylmethanofuran dehydrogenase
molybdenum-cofactor-containing enzymes and, 235, 241
Four-helix-bundle protein
protein folding and, 556
Fourier-transform infrared spectroscopy (FTIR)
and amyloid seeding in Alzheimer's disease and scrapie, 388
Frameshifting
and ribosomes and translation, 707
Framework model
protein folding and, 557
Free-energy changes
and RNA and protein enzyme catalysis, 42
Free radicals
and RNA and protein enzyme catalysis, 44
Freeze-etch electron microscopy
Z ring and, 100
Frogs
D-amino acids in animal peptides and, 339–40, 344
mtDNA maintenance in vertebrates and, 414, 418
Fructose-1,6 biphosphatase
and RNA and protein enzyme catalysis, 41
F-spondin
subtractive cloning and, 776
FtsA protein
Z ring and, 104–5

FtsZ protein
Z ring and, 93, 95–114
$F_9$5AH cells
acyl-coenzyme A:cholesterol acyltransferase and, 631
Fulicin
D-amino acids in animal peptides and, 340
Functional models
B_{12}-dependent enzymes and, 281–83
Functional overlap
prokaryotic poly(A) mRNA and, 173, 184
Funnel web spider venom
D-amino acids in animal peptides and, 337, 341, 344

G

GAL4 protein
replication protein A and, 75–76
GAP proteins
G protein structures and, 640–41, 650, 663–65, 673
Gap jumping
transcript elongation and, 160
Gastric ATPase
movement in biological systems and, 17
GC-cluster-C
mtDNA maintenance in vertebrates and, 415
GEF proteins
G protein structures and, 640, 670–72
Genbank sequence data base
replication protein A and, 67
transcript elongation and, 135
Gene 32 protein
replication protein A and, 74
Gene expression modulation
replication protein A and, 61
Gene isolation
subtractive cloning and, 751–80
General acid catalysis
movement in biological systems and, 8, 13
and RNA and protein enzyme catalysis, 25–31
General base catalysis
movement in biological systems and, 8
and RNA and protein enzyme catalysis, 25–28
Genetics
acyl-coenzyme A:cholesterol acyltransferase and, 618–19, 621–22, 634
and amyloid seeding in Alzheimer's disease and scrapie, 387, 394, 400
B_{12}-dependent enzymes and, 275, 298
choosing insertion site and, 437, 439, 452
herpes simplex virus DNA replication and, 347, 350–55, 372–75
membrane phospholipid diversity and, 201–3, 205, 207–11, 218, 227–28
molybdenum-cofactor-containing enzymes and, 256
mtDNA maintenance in vertebrates and, 411, 417, 420, 424–25, 427, 430
PEPCK, 582–608
prokaryotic poly(A) mRNA and, 173, 176–77, 179–84, 187, 189–92, 194
protein folding and, 567
protein import into mitochondria and, 863, 884–92
replication protein A and, 63–64, 66–69, 74, 76, 80–82, 84, 86–87
and ribosomes and translation, 679
transcript elongation and, 117, 123–24, 136–37, 139, 144–46, 148–50, 155
transcriptional regulation by cAMP and, 807
Z ring and, 95–96, 102, 105, 107–14
Gibbs free energy
movement in biological systems and, 12–14
protein folding and, 561, 565
glm gene
B_{12}-dependent enzymes and, 275
Global climate control
molybdenum-cofactor-containing enzymes and, 241–42
Globin
PEPCK gene expression and, 601
subtractive cloning and, 760–61
Glucagon
PEPCK gene expression and, 584, 599–600
Glucocorticoids
acyl-coenzyme A:cholesterol acyltransferase and, 621
PEPCK gene expression and, 581, 586, 589–95, 600
Gluconeogenesis
PEPCK gene expression and, 581, 584, 598, 602, 604–5
Glucosamine
membrane phospholipid diversity and, 203
Glucose
D-amino acids in animal peptides and, 343
O-linked glycosylation and, 329–30
PEPCK gene expression and, 581, 593, 595–600, 602, 606, 608
replication protein A and, 86
Glucose 6-phosphatase
PEPCK gene expression and, 603–4
Glutamate
ATP synthase and, 721–22, 739
B_{12}-dependent enzymes and, 288, 290
cell adhesion molecules and, 850–51
force effects on kinetics and, 789
G protein structures and, 650, 658, 667
molybdenum-cofactor-containing enzymes and, 244–45, 251, 253–54, 261
and RNA and protein enzyme catalysis, 20
Glutamate mutase
B_{12}-dependent enzymes and, 269, 275, 299–301, 308
Glutamine
ATP synthase and, 721–22
G protein structures and, 660–62
transcriptional regulation by cAMP and, 816
Glutaraldehyde
replication protein A and, 70
Glutathione
D-amino acids in animal peptides and, 341
Glutathione-*S*-transferase
acyl-coenzyme A:cholesterol acyltransferase and, 623
ATP synthase and, 722
Glyceraldehyde-3-phosphate ferredoxin oxidoreductase
molybdenum-cofactor-containing enzymes and, 235
Glyceride glycerol
PEPCK gene expression and, 581
Glycerol

membrane phospholipid diversity and, 201–2
movement in biological systems and, 7
Z ring and, 99
Glycerophosphate
membrane phospholipid diversity and, 203
Glycine
D-amino acids in animal peptides and, 340, 343
ATP synthase and, 721, 735, 738
B_{12}-dependent enzymes and, 285, 287–89
G protein structures and, 652, 655, 669
molybdenum-cofactor-containing enzymes and, 262
Z ring and, 99
Glycogen
PEPCK gene expression and, 602–3, 606
Glycogen synthase
PEPCK gene expression and, 606
Glycolysis
PEPCK gene expression and, 584
Glycosylation
O-linked, 315–31
Golgi apparatus
acyl-coenzyme A:cholesterol acyltransferase and, 629–30, 632
G proteins
coupled receptors
clathrin-coated vesicles and, 542–43
effector recognition, 654
complex of elongation factor Tu with amino-acyl tRNA, 656–57
effector interactions with G_α subunits, 657–59
Ras-effector interactions, 655–56
GTP hydrolysis mechanism, 659–63
guanine nucleotide exchange regulation
$\beta\gamma$ subunits of heterotrimeric G proteins, 665–70
elongation factor Ts, 672
GEFs of Ras family, 670–72
guanine nucleotide recognition, 650–54
mechanism of catalytic rate enhancement by GAP, 663–65
membrane phospholipid diversity and, 211, 226
perspective, 640–41
phospholipase C and, 485–86
phospholipase D and, 493–94
and RNA and protein enzyme catalysis, 41
tertiary structures
conserved nucleotide binding motifs, 644
GTPase fold, 641–43
heterotrimeric G protein α subunits, 648–50
Ras and its homologs, 643–47
translation elongation factors, 647–48
Gramicidin
ATP synthase and, 736
Gramicidin S
D-amino acids in animal peptides and, 338
"Greek key" motif
G protein structures and, 647
Gre proteins
transcript elongation and, 125, 132–33, 148, 162
GroE mutation
Z ring and, 97
Ground state
movement in biological systems and, 1
destabilization
and RNA and protein enzyme catalysis, 41–43, 54
Growth factors
transcriptional regulation by cAMP and, 807
GR transcription factor
PEPCK gene expression and, 590
GTPase-activating protein
phospholipase C and, 486–87
GTPase fold
G protein structures and, 641–43
GTPases
clathrin-coated vesicles and, 534–35
membrane phospholipid diversity and, 211
Z ring and, 93, 94, 98–99, 112
GTP-cap
Z ring and, 99, 114
GTP hydrolases
G protein structures and, 639–73
Guanidine-HCl
replication protein A and, 65
Guanidinium thiocyanate
and amyloid seeding in Alzheimer's disease and scrapie, 401
Guanosine
and RNA and protein enzyme catalysis, 26–27, 32, 41, 45–46
Guanosine diphosphate (GDP)
G protein structures and, 639–41, 645–48, 651–58, 664–65, 667–71
Z ring and, 99
Guanosine monophosphate (GMP)
G protein structures and, 652
molybdenum-cofactor-containing enzymes and, 237
Guanosine triphosphate (GTP)
force effects on kinetics and, 789–90
G protein structures and, 639–42, 645–73
Z ring and, 99–101
Guanylate
prokaryotic poly(A) mRNA and, 192

H

H^+ translocation
ATP synthase and, 735–38
H3.3 gene
transcript elongation and, 123, 125, 145
Haemoconchus contortus
PEPCK gene expression and, 583
Haemophilus influenzae
B_{12}-dependent enzymes and, 275
prokaryotic poly(A) mRNA and, 185
Z ring and, 111–12
Hairpins
G protein structures and, 646, 656, 670
transcript elongation and, 123, 126–27, 129, 137–38, 160
Half-life
prokaryotic poly(A) mRNA and, 186–90
transcript elongation and, 123, 126–27
Half-reactions
molybdenum-cofactor-containing enzymes and, 236
movement in biological systems and, 15–17
Halobacterium halobium

prokaryotic poly(A) mRNA and, 193
and ribosomes and translation, 707, 711
Haloferax volcanii
Z ring and, 112
Hammerhead ribozyme
and RNA and protein enzyme catalysis, 24, 28, 32, 35–37, 43, 48, 52
Hammett σ-ρ values
movement in biological systems and, 12
Hand-over-hand model
force effects on kinetics and, 792
Hard-core repulsion
protein folding and, 553
Hard-sphere model
protein folding and, 554
Head groups
membrane phospholipid diversity and, 205, 213, 222–23, 225
Heat baths
protein folding and, 565
Heat-shock genes
prokaryotic poly(A) mRNA and, 189
transcript elongation and, 124, 140, 154
Heat-shock proteins
O-linked glycosylation and, 315
protein import into mitochondria and, 884–92, 894–95
Heavy-strand promoter
mtDNA maintenance in vertebrates and, 411–12, 415–16, 418
HeLa cells
mtDNA maintenance in vertebrates and, 417, 428
prokaryotic poly(A) mRNA and, 191
replication protein A and, 63
subtractive cloning and, 758
Helicase
replication protein A and, 76
Helicity
ATP synthase and, 720, 724
B_{12}-dependent enzymes and, 288
cell adhesion molecules and, 848–50
G protein structures and, 649–50, 654–57, 659, 664–68, 671
membrane phospholipid diversity and, 214, 220
molybdenum-cofactor-containing enzymes and, 242, 259, 262
protein folding and, 556–57, 559, 561, 570, 574
replication protein A and, 74, 76
and ribosomes and translation, 693–94
and RNA and protein enzyme catalysis, 35, 37, 40, 44, 46
Z ring and, 101
Hemes
molybdenum-cofactor-containing enzymes and, 264
Hemoglobin
and amyloid seeding in Alzheimer's disease and scrapie, 399
force effects on kinetics and, 794
Heparin
cell adhesion molecules and, 846–47
transcript elongation and, 129
Hepatocytes
acyl-coenzyme A:cholesterol acyltransferase and, 616, 633
HepG2 cells
acyl-coenzyme A:cholesterol acyltransferase and, 616, 634
Herpes simplex virus type 1 (HSV-1)
gene products essential for origin-specific DNA replication
DNA helicase, 362–64
DNA polymerase, 364–68
DNA primase, 362–64
ICP8 single-strand DNA-binding protein, 359–62
origin-binding protein, 355–59
genome replication model
cleavage of DNA, 351–52
origins of replication, 352–55
packaging of DNA, 351–52
structure of replicating DNA, 350–51
host enzymes implicated in HSV-1 DNA replication, 375
HSV-1 gene products not essential for origin-specific DNA replication
alkaline endo-exonuclease, 372
deoxyuridine triphosphatase, 373–74
ribonucleotide reductase, 374–75
thymidine kinase, 374
uracil *N*-glycosylase, 372–73
introduction, 348–50
protein-protein interactions, 368–72
recombination and DNA replication, 377–78
reconstitution of DNA replication in vitro, 375–77
Herpesviridae
herpes simplex virus DNA replication and, 347–78
Heteroatoms
and RNA and protein enzyme catalysis, 33
Heterochromatin
choosing insertion site and, 439
Heterocyclic rings
subtractive cloning and, 757
Heterodimerization
herpes simplex virus DNA replication and, 347
Heterogeneous seeding
and amyloid seeding in Alzheimer's disease and scrapie, 395–96, 401–2, 404
Heterotrimeric DNA-binding protein
single-stranded, 61–88
Heterotrimerization
G protein structures and, 639–41, 648–50, 657, 665–71
Hexahistidine
prokaryotic poly(A) mRNA and, 184
Hexokinases
Z ring and, 104
High-affinity binding
cell adhesion molecules and, 823
High-density lipoprotein (HDL)
acyl-coenzyme A:cholesterol acyltransferase and, 614
movement in biological systems and, 7
Hinges
flexible
protein folding and, 555, 573
his operon
transcript elongation and, 123, 126–28, 138, 159
Histidine
acyl-coenzyme A:cholesterol acyltransferase and, 617
ATP synthase and, 739

B_{12}-dependent enzymes and, 284–86, 288–92, 295, 305–6, 308–9
G protein structures and, 663, 667
molybdenum-cofactor-containing enzymes and, 261
protein folding and, 269
and ribosomes and translation, 711
and RNA and protein enzyme catalysis, 43
Histones
transcript elongation and, 123, 125, 145
HK022 virus
transcript elongation and, 142
HLA alleles
protein folding and, 567
HMG14 protein
transcript elongation and, 154
HMG-box transcription factor
mtDNA maintenance in vertebrates and, 413–14, 423
HMG CoA reductase
acyl-coenzyme A:cholesterol acyltransferase and, 617, 628
HNF hepatic nuclear factors
PEPCK gene expression and, 586, 589–90, 592, 595, 598–99, 606–7
HOH
movement in biological systems and, 10
Homeostasis
glucose
O-linked glycosylation and, 329–30
PEPCK gene expression and, 598–600, 602, 606, 608
Homocysteine
B_{12}-dependent enzymes and, 269
Homogeneous seeding
and amyloid seeding in Alzheimer's disease and scrapie, 395
Homologous recombination
mtDNA maintenance in vertebrates and, 429
Homolysis
carbon-cobalt bond
B_{12}-dependent enzymes and, 306–8
Homopolymeric runs
transcript elongation and, 134
Homo sapiens
B_{12}-dependent enzymes and, 275
replication protein A and, 68
Hormones
D-amino acids in animal peptides and, 337, 339–41, 343
PEPCK gene expression and, 581, 589–93, 599, 605
transcriptional regulation by cAMP and, 807
Host enzymes
herpes simplex virus DNA replication and, 375
hsp genes
transcript elongation and, 124, 140, 154
hsPRA genes
replication protein A and, 64–65, 67–69, 74, 76, 80–81, 84, 86
H-strand
mtDNA maintenance in vertebrates and, 411–23
HU bacterial chromosome-binding protein
mtDNA maintenance in vertebrates and, 425
Human immunodeficiency virus (HIV)
transcript elongation and, 143
Human single-stranded DNA-binding protein
see Replication protein A (RPA)
Humicola insolens
molybdenum-cofactor-containing enzymes and, 242
Hybridization
subtractive cloning and, 751–55, 756–62, 765, 769, 770–73, 777
Hydride transfer
molybdenum-cofactor-containing enzymes and, 255, 263–64
Hydrodynamics
and amyloid seeding in Alzheimer's disease and scrapie, 398
force effects on kinetics and, 800
Hydrogen bonds
ATP synthase and, 721
B_{12}-dependent enzymes and, 284, 286, 306
cell adhesion molecules and, 850
G protein structures and, 647, 652–54, 661
membrane phospholipid diversity and, 216
molybdenum-cofactor-containing enzymes and, 239–40, 244–45, 249, 251–54, 261–63
protein folding and, 554, 564
replication protein A and, 71
and RNA and protein enzyme catalysis, 30, 33, 41
transcript elongation and, 126
Hydrogen protection factors
protein folding and, 561
Hydrogen transfer
B_{12}-dependent enzymes and, 301–2
Hydrolysis
acyl-coenzyme A:cholesterol acyltransferase and, 627, 631
ATP synthase and, 717–18, 728–34, 740, 742, 744
force effects on kinetics and, 786, 789, 794–95, 799–800
G protein structures and, 639–40, 645, 652–55, 657–63, 671, 673
movement in biological systems and, 8, 11, 14–17
replication protein A and, 76
and RNA and protein enzyme catalysis, 32, 43, 52
Z ring and, 99
Hydrophobic collapse model
protein folding and, 557, 560, 562
Hydrophobic gate
G protein structures and, 663
Hydrophobicity
G protein structures and, 667, 669
membrane phospholipid diversity and, 211, 214
prokaryotic poly(A) mRNA and, 184
protein folding and, 560, 570, 573–74
and RNA and protein enzyme catalysis, 34
Hydroxyapatite
subtractive cloning and, 757, 759, 761, 765–66, 774, 776
Hydroxycarboxylate viologen oxidoreductase
molybdenum-cofactor-containing enzymes and, 259
25-Hydroxycholesterol
acyl-coenzyme A:cholesterol

acyltransferase and, 623–24, 626
8-Hydroxy-deoxyguanosine
mtDNA maintenance in vertebrates and, 426
Hydroxyl groups
G protein structures and, 652
molybdenum-cofactor-containing enzymes and, 237
movement in biological systems and, 8
and RNA and protein enzyme catalysis, 27–28, 31–32, 40, 45, 48, 52
Hydroxyl radicals
mtDNA maintenance in vertebrates and, 426
and ribosomes and translation, 694
2-Hydroxypropyl-beta-cyclodextrin
acyl-coenzyme A:cholesterol acyltransferase and, 631
"Hyper" mice
and amyloid seeding in Alzheimer's disease and scrapie, 402
Hyperthermophilic archeons
molybdenum-cofactor-containing enzymes and, 258
Hyphae
aerial
Z ring and, 111
Hyphomicrobium sp.
prokaryotic poly(A) mRNA and, 175
Hypoglycemia
PEPCK gene expression and, 599–600

I

ICAMs
molecular structure and, 851, 853
ICP8 single-strand DNA-binding protein
herpes simplex virus DNA replication and, 359–62
I domain
cell adhesion molecules and, 850–51
IGF-BP1 gene
PEPCK gene expression and, 595
IgSF domains
cell adhesion molecules and, 828, 855–56
ilv operons
transcript elongation and, 124, 127, 138
Imidazoles
movement in biological systems and, 8
and RNA and protein enzyme catalysis, 20, 31, 43
Iminium ion
movement in biological systems and, 11
Immobilization methods
subtractive cloning and, 767, 769, 774
Immunoblot analysis
acyl-coenzyme A:cholesterol acyltransferase and, 623
Immunoelectron microscopy
Z ring and, 96–97, 103
Immunofluorescence microscopy
Z ring and, 96, 102–5, 112–13
Immunoglobulin superfamily domains
cell adhesion molecules and, 823–29
Immunolocalization
replication protein A and, 66
Import sequence
Z ring and, 113
Inchworm model
transcript elongation and, 158–62
Inclusion bodies
prokaryotic poly(A) mRNA and, 184
Indirect immunofluorescence microscopy
Z ring and, 102
Inducible inhibitor
Z ring and, 95–96, 106
Induction
transcriptional regulation by cAMP and, 812–14
Infrared spectroscopy
and amyloid seeding in Alzheimer's disease and scrapie, 400
Inhibition
acyl-coenzyme A:cholesterol acyltransferase and, 616–17, 633–34
force effects on kinetics and, 786
movement in biological systems and, 11
PEPCK gene expression and, 581, 593–95
Initial nucleation event
and RNA and protein enzyme catalysis, 22
Initiation
clathrin-coated vesicles and, 530–32
transcription
mtDNA maintenance in vertebrates and, 414–15
Inosine
ATP synthase and, 721
Inosine monophosphate (IMP)
molybdenum-cofactor-containing enzymes and, 237
Inositol polyphosphates
clathrin-coated vesicles and, 525
Insertion site
choosing, 437–68
Insulin
PEPCK gene expression and, 581, 584, 586, 592–96, 599–600, 604–5
Integrases
retroviral
choosing insertion site and, 447–48
Integration/excision cycle
choosing insertion site and, 440–41
Integrins
cell adhesion molecules and, 845
molecular structure and, 823, 847–51, 853
Intercistronic regions
prokaryotic poly(A) mRNA and, 173, 179, 191
Interconversion
ATP synthase and, 734–35
Interdomain interfaces
protein folding and, 555
Interface canyon
and ribosomes and translation, 689
Intermediary metabolism
transcriptional regulation by cAMP and, 807
Intermediate filament proteins
O-linked glycosylation and, 324–25
Intermediate radical species
B_{12}-dependent enzymes and, 299–301
Intermembrane space
into mitochondria
sorting of proteins to various mitochondrial subcompartments, 900–902
Intermolecular transposition
choosing insertion site and, 454–55

Internal interfaces
protein folding and, 555
Internal targeting signals
protein import into mitochondria and, 868–70
Intestines
acyl-coenzyme A:cholesterol acyltransferase and, 615
Intracellular transport
cholesterol
acyl-coenzyme A:cholesterol acyltransferase and, 613, 628–29, 632–34
Intramolecular transposition
choosing insertion site and, 454–55
Intrinsic binding energy
and RNA and protein enzyme catalysis, 34–43, 54
Intrinsic blocks
transcript elongation and, 125–28
Introns
mobile group II
choosing insertion site and, 463–65
and RNA and protein enzyme catalysis, 22, 28, 32, 45–47
Invagination
of coated pits
clathrin-coated vesicles and, 532–33
cytoplasmic membrane
Z ring and, 94, 97, 109, 111–12, 114
Invertebrates
D-amino acids in animal peptides and, 338, 344
In vitro reconstitution
herpes simplex virus DNA replication and, 375–77
In vitro transcription
subtractive cloning and, 763–64
Ionizing radiation
mtDNA maintenance in vertebrates and, 426
Ion transport
active
movement in biological systems and, 1, 10–11, 15–17
force effects on kinetics and, 799–802, 804
and RNA and protein enzyme catalysis, 25–31
IPTG
membrane phospholipid diversity and, 209–10, 212–13
IS10/Tn10
choosing insertion site and, 439
I set
cell adhesion molecules and, 825–28
Isobutyryl CoA mutase
B_{12}-dependent enzymes and, 275
Isozymes
phospholipase C, 477, 479, 481–89, 502
Isoforms
acyl-coenzyme A:cholesterol acyltransferase and, 619, 621
Isolation
gene
subtractive cloning and, 751–80
Isoleucine
D-amino acids in animal peptides and, 340, 343
B_{12}-dependent enzymes and, 285

J

J774 cells
acyl-coenzyme A:cholesterol acyltransferase and, 631, 633–34
Jencks, WP, 1–18
Jigsaw puzzle
three-dimensional
protein folding and, 549, 554, 556, 558

K

K^+
movement in biological systems and, 17
Ketone bodies
PEPCK gene expression and, 598
Kidney
PEPCK gene expression and, 581, 585, 587, 588–89, 592–93, 599–601, 605, 607
Kinase-inducible domain
transcriptional regulation by cAMP and, 815–16
Kinases
force effects on kinetics and, 793
Kinesin
ATP synthase and, 744
force effects on kinetics and, 792
Kinesin dynein ATPases
force effects on kinetics and, 802–3
Kinetics
and amyloid seeding in Alzheimer's disease and scrapie, 387–91, 393–95, 397–99, 405
ATP synthase and, 717, 728–31, 734–35, 744
B_{12}-dependent enzymes and, 279–81, 300–1
force effects on biochemical kinetics and, 785–804
movement in biological systems and, 15, 17–18
PEPCK gene expression and, 600
protein folding and, 557–58, 560–62
and RNA and protein enzyme catalysis, 22, 45, 47
subtractive cloning and, 751, 753–62
transcript elongation and, 162
Kinetochore
force effects on kinetics and, 789
Klenow fragment
subtractive cloning and, 768, 772
knirps genes
transcript elongation and, 146
knirps-related genes
transcript elongation and, 146
Knockouts
gene
acyl-coenzyme A:cholesterol acyltransferase and, 621–22
PEPCK gene expression and, 581
Knowledge-based methods
protein folding and, 549
Kuru
and amyloid seeding in Alzheimer's disease and scrapie, 399

L

L1 protein
choosing insertion site and, 462–63
molecular structure and, 823, 836–39
L4 protein
transcript elongation and, 137
lac operon
membrane phospholipid

diversity and, 210, 212–13, 216
lac repressor gene
prokaryotic poly(A) mRNA and, 179–80
transcript elongation and, 130, 139
α-Lactalbumin
protein folding and, 559–60
Lactate
PEPCK gene expression and, 598
Lactate dehydrogenase
cell adhesion molecules and, 850
Lactocin S
D-amino acids in animal peptides and, 339
lacZY intercistronic regions
prokaryotic poly(A) mRNA and, 191
Lag time
and amyloid seeding in Alzheimer's disease and scrapie, 393–95
Lambda library
Z ring and, 109
Lamellipodia
force effects on kinetics and, 792
Lanthione
D-amino acids in animal peptides and, 338
Lantibiotics
D-amino acids in animal peptides and, 338–39
La protein
transcript elongation and, 151
Laser tweezers
force effects on kinetics and, 785, 787
"Late" genes
prokaryotic poly(A) mRNA and, 181
Lattices
protein folding and, 554, 569
Z ring and, 100–1
L-cells
subtractive cloning and, 758
Leaky mutants
membrane phospholipid diversity and, 208
PEPCK gene expression and, 605
Leaving-group
and RNA and protein enzyme catalysis, 26
Leishmania major
O-linked glycosylation and, 327
Lethicin:cholesterol acyltransferase (LCAT)
acyl-coenzyme A:cholesterol acyltransferase and, 614
LEF-1 protein
mtDNA maintenance in vertebrates and, 423
Leucine
acyl-coenzyme A:cholesterol acyltransferase and, 618, 620–21
D-amino acids in animal peptides and, 340, 342
B_{12}-dependent enzymes and, 285
molybdenum-cofactor-containing enzymes and, 262
zipper
PEPCK gene expression and, 592
leu operon
transcript elongation and, 127, 138
lexA gene
membrane phospholipid diversity and, 210
transcript elongation and, 130
Li^+
ATP synthase and, 736
Libraries
prokaryotic poly(A) mRNA and, 173, 176–77
protein folding and, 566
subtractive cloning and, 751–52, 763–64, 769, 772–73, 776–78
Z ring and, 109
Ligands
B_{12}-dependent enzymes and, 269, 273–74, 276–78, 284, 288–91, 294–95, 306, 308
cell adhesion molecules and, 848–50
clathrin-coated vesicles and, 540–43
force effects on kinetics and, 787–88
G protein structures and, 653, 665, 670
molybdenum-cofactor-containing enzymes and, 246–47, 249–54, 257–58, 262–63
and ribosomes and translation, 695
and RNA and protein enzyme catalysis, 47
Ligase
acyl-coenzyme A:cholesterol acyltransferase and, 619
Light chains
D-amino acids in animal peptides and, 342
Light-strand promoter
mtDNA maintenance in vertebrates and, 411–16, 418, 422–23
Linear viral genome
herpes simplex virus DNA replication and, 347
LINE element
choosing insertion site and, 440, 462–63
Lipid polymorphism
membrane phospholipid diversity and, 199
Lipids
membrane phospholipid diversity and, 199–228
protein import into mitochondria and, 867–72, 884
Z ring and, 101
Lipopolysaccharide (LPS)
membrane phospholipid diversity and, 203, 217, 221–22
Lipoproteins
acyl-coenzyme A:cholesterol acyltransferase and, 615–16, 627, 629–31
movement in biological systems and, 6–7
Liposomes
acyl-coenzyme A:cholesterol acyltransferase and, 617
Liver
PEPCK gene expression and, 581, 584, 586–87, 589, 592–93, 595–97, 599–606
Local energy minimization
protein folding and, 563
Local hopping
choosing insertion site and, 455–58
Long terminal repeats (LTRs)
choosing insertion site and, 440
Long-term memory
transcriptional regulation by cAMP and, 807
Loops
ATP synthase and, 721, 738
G protein structures and, 641, 646–47, 652–53, 655–57, 667, 669–71
molybdenum-cofactor-containing enzymes and, 249
mtDNA maintenance in vertebrates and, 411–12, 414–15, 417–21, 422, 425–26

PEPCK gene expression and, 584
prokaryotic poly(A) mRNA and, 177, 179–81, 187–89, 194
protein folding and, 570
replication protein A and, 71
and RNA and protein enzyme catalysis, 44
transcript elongation and, 152
Loose-packing
protein folding and, 574
Low-density lipoprotein (LDL)
acyl-coenzyme A:cholesterol acyltransferase and, 615, 618, 626–27, 631, 633–34
movement in biological systems and, 7
Low target site selectivity
choosing insertion site and, 444–45
Low-violations cluster
protein folding and, 570
lpp gene
membrane phospholipid diversity and, 210, 212
prokaryotic poly(A) mRNA and, 176–78, 185, 187
L-strand
mtDNA maintenance in vertebrates and, 411–12
Luciferase
acyl-coenzyme A:cholesterol acyltransferase and, 620–21
Lysine
ATP synthase and, 721, 738–40
B_{12}-dependent enzymes and, 285–86, 306, 308
G protein structures and, 652–53
membrane phospholipid diversity and, 215
molybdenum-cofactor-containing enzymes and, 262
and RNA and protein enzyme catalysis, 20, 30
Lysosomal hydrolases
clathrin-coated vesicles and, 511
Lysosomes
acyl-coenzyme A:cholesterol acyltransferase and, 615, 627–31, 633
and amyloid seeding in Alzheimer's disease and scrapie, 392, 396
clathrin-coated vesicles and, 511
Lysozyme
protein folding and, 556, 567

M

M65131
B_{12}-dependent enzymes and, 275
MA-10 Leydig tumor cells
acyl-coenzyme A:cholesterol acyltransferase and, 632
Macromolecular mechanisms
force effects on kinetics and, 789–94
Macrophages
acyl-coenzyme A:cholesterol acyltransferase and, 615, 617, 619, 621–34
"Mad cow" disease
and amyloid seeding in Alzheimer's disease and scrapie, 399
MAG locus
replication protein A and, 86
Main chain
G protein structures and, 652, 654–55
protein folding and, 549, 551, 563, 565, 567, 573
Malaria
O-linked glycosylation and, 327
MalE-SulA fusion
Z ring and, 96
Malhotra-Harvey approach
and ribosomes and translation, 694
Mammalian cells
acyl-coenzyme A:cholesterol acyltransferase and, 613, 624
Mammalian tissues
PEPCK gene expression and, 584–85
MAP kinases
force effects on kinetics and, 793
Matrix
mitochondrial
protein import into mitochondria and, 863, 866–67, 889–90, 892–97
Maturity onset diabetes of youth (MODY)
PEPCK gene expression and, 596
MAZ protein
transcript elongation and, 151
Mean-field approach
protein folding and, 567
Mechanistic studies
B_{12}-dependent enzymes and, 279–81
Membrane binding
clathrin-coated vesicles and, 511, 523–24
Membrane phospholipid diversity
anionic phospholipid functions, 207–8
cardiolipin, 208–16
eukaryotic cells, 214–16
initiation of DNA replication, 209–11
nucleotide-binding proteins, 211
phosphatidylglycerol, 208–16
translocation of proteins across membranes, 212–14
future research, 227–28
introduction, 200–1
lipid polymorphism, 222–27
metabolism, 201
metabolism
E. coli, 201–5
eukaryote, 206–7
zwitterionic phospholipids, 218–22
membrane protein assembly, 218–22
phosphatidylethanolamine, 216–22
solute transport, 217–18
Membrane proteins
O-linked glycosylation and, 323–26
Membranes
mitochondrial
protein import into mitochondria and, 863, 868–70, 876–87, 897–906
2-Mercaptoethanesulfonate (HSCoM)
B_{12}-dependent enzymes and, 269, 272, 292
Messenger RNA (mRNA)
acyl-coenzyme A:cholesterol acyltransferase, 619, 634
D-amino acids in animal peptides and, 338
G protein structures and, 647
mtDNA maintenance in vertebrates and, 424
PEPCK gene, 585, 589, 594, 596, 598, 603, 606
poly(A), 173–95
replication protein A and, 66
and ribosomes and translation, 679, 698–700
subtractive cloning and, 753–55, 758–61, 763, 772
Metabolism

B_{12}-dependent enzymes and, 292
eukaryotic DNA replication protein A and, 61–88
O-linked glycosylation and, 327–30
PEPCK gene expression and, 581, 583–84, 604
phospholipid, 201–7
transcript elongation and, 144–46
transcriptional regulation by cAMP and, 807
Metal-binding sites
cell adhesion molecules and, 848–51
Metaphase plate
force effects on kinetics and, 785–86
Metastable intermediates
and amyloid seeding in Alzheimer's disease and scrapie, 404
Metazoa
transcript elongation and, 120
Metal ions
and RNA and protein enzyme catalysis, 25–31, 40, 53
Metallothionine genes
replication protein A and, 86–87
Met-deltorphin
D-amino acids in animal peptides and, 339, 341
Methanobacterium thermoautotrophicum
methyltransferases and, 275, 292–93
Methanococcus jannaschii
Z ring and, 112
Methanococcus vannielii
prokaryotic poly(A) mRNA and, 193
Methanogens
B_{12}-dependent enzymes and, 291–95
Methanosarcina barkeri
methyltransferases and, 275, 288, 292, 294–95
Methanosarcina thermophila
methyltransferases and, 275, 294
metH gene
B_{12}-dependent enzymes and, 275
Methionine
D-amino acids in animal peptides and, 341
ATP synthase and, 738–39
cell adhesion molecules and, 851
molybdenum-cofactor-containing enzymes and, 255
Methionine synthase
B_{12}-dependent enzymes and, 269, 272–75, 278–91, 294–95, 309
Methylation
PEPCK gene expression and, 600–1
Methyleneglutarate mutase
B_{12}-dependent enzymes and, 269, 275
Methylmalonyl-CoA mutase
B_{12}-dependent enzymes and, 269, 273–75, 291, 294, 296–308
N-Methyl purines
mtDNA maintenance in vertebrates and, 427
Methyltetrahydrofolate
B_{12}-dependent enzymes and, 269
Methyltetrahydromethanopterin: CoM methyltransferase corrinoid-binding subunit
B_{12}-dependent enzymes and, 275
Methyltransferases
B_{12}-dependent enzymes and, 269, 272, 274–75, 292–95
MF_1
heart
ATP synthase and, 719–22, 738, 740–41
Mg^{2+}
ATP synthase and, 720–24, 729–34
cell adhesion molecules and, 848–51
G protein structures and, 639, 641–58, 660–65, 669–70, 672
membrane phospholipid diversity and, 215, 223–24, 226
molybdenum-cofactor-containing enzymes and, 239, 262
and ribosomes and translation, 690
and RNA and protein enzyme catalysis, 26, 28, 41–42
transcript elongation and, 133
Z ring and, 99
MGDG
membrane phospholipid diversity and, 223–24
mgm gene
B_{12}-dependent enzymes and, 275
$MG(OH)^+$
and RNA and protein enzyme catalysis, 27–28, 30
$MgCl_2$
replication protein A and, 70
Micelles
and amyloid seeding in Alzheimer's disease and scrapie, 389, 394
Michaelis-Menton kinetics
B_{12}-dependent enzymes and, 282
Microsomes
acyl-coenzyme A:cholesterol acyltransferase and, 617, 621–22
Microtubule-associated proteins (MAPs)
force effects on kinetics and, 790–91
O-linked glycosylation and, 325
Microtubule motors
force effects on kinetics and, 786, 789
Microtubules
Z ring and, 99–101
MIDAS motif
cell adhesion molecules and, 850–51
"Middle" genes
prokaryotic poly(A) mRNA and, 181
min genes
Z ring and, 107–10, 113–14
Minicell phenotype
Z ring and, 96–97, 105, 107–8
Mini-rings
Z ring and, 101
MIP1 gene
mtDNA maintenance in vertebrates and, 420
Mitochondria
ATP synthase and, 727–28, 735, 737
membrane phospholipid diversity and, 206–7, 221
PEPCK gene expression and, 598
prokaryotic poly(A) mRNA and, 191–92
protein import and, 863–907
Z ring and, 94, 113
Mitochondrial DNA (mtDNA)
maintenance in vertebrates
DNA polymerase gamma and accessory proteins, 420–21
future prospects, 429–30
H-strand mtDNA replication, 417–22
introduction, 410–12

light-strand DNA replication initiation, 422–23
mtDNA repair, 426–28
mtDNA replication, 412–25
mtTFA role in mtDNA maintenance, 425–26
primer RNA processing, 416–17
recombination between vertebrate mtDNA molecules, 428–29
regulation, 423–25
stable RNA-DNA hybrid structure at O_H, 415–16
structure and integrity of mtDNA in vivo, 425–29
transcription initiation at light-strand promoter, 414–15
Mitochondrial intermediate peptidase (MIP)
protein import into mitochondria and, 893
Mitosis
replication protein A and, 66
Mn^{2+}
cell adhesion molecules and, 850
and RNA and protein enzyme catalysis, 26, 28, 30
transcript elongation and, 133
Molecular chaperones
protein import into mitochondria and, 863–74, 894–95, 897, 907
Molecular dynamics simulations
protein folding and, 551–52, 565–67, 572–73
Molecular modeling
and ribosomes and translation, 692–94
Molecular motors
ATP synthase and, 744
force effects on kinetics and, 785–87, 794–804
protein import into mitochondria and, 890
MOLSCRIPT program
molybdenum-cofactor-containing enzymes and, 243
Molten-globule state
protein folding and, 557–62
Molybdenum-cofactor-containing enzymes
aldehyde ferredoxin oxidoreductase family, 258–59
active site structure, 260–63
mechanistic implications, 263–64
Pyrococcus furiosus aldehyde ferridoxin oxidoreductase structure, 259–60
DMSO reductase family, 241
active site structure, 242, 244–47
mechanism, 247–48
structure, 242–43
enzyme families containing molybdenum cofactor, 240–41
future research, 264–65
introduction, 234–41
pterin cofactor, 237–40
reactions catalyzed by, 236–37
sulfite oxidase, 255–56
active site structure as defined by EXAFS and EPR studies, 257
mechanistic implications, 257–58
xanthine oxidase family, 249–50
active site structure, 251–53
Desulfovibro gigas aldehyde oxidoreductase structure, 250–51
mechanistic implications, 253–55
Molybdenum hydroxylases
molybdenum-cofactor-containing enzymes and, 233
Molybdopterin
molybdenum-cofactor-containing enzymes and, 233, 261–63, 265
Monocistronic mRNA
prokaryotic poly(A) mRNA and, 177
Monomers
and amyloid seeding in Alzheimer's disease and scrapie, 390–91
Monosaccharides
membrane phospholipid diversity and, 202
Monomers
Z ring and, 99
Monte Carlo minimization
protein folding and, 564–65, 572–73
Mop protein
molybdenum-cofactor-containing enzymes and, 250–54, 259, 262–64
Morphology
and amyloid seeding in Alzheimer's disease and scrapie, 396–99, 402, 404
membrane phospholipid diversity and, 215
and RNA and protein enzyme catalysis, 19
Z ring and, 102–5
MotAB complexes
force effects on kinetics and, 799, 801
Motor proteins
force effects on kinetics and, 794–804
and RNA and protein enzyme catalysis, 48
Movement
biological systems and, 1–18
MSH genes
mtDNA maintenance in vertebrates and, 427
Mss4 protein
G protein structures and, 670
MT-HSP70
protein import into mitochondria and, 888–89
mtr genes
B_{12}-dependent enzymes and, 275
mtTFA transcription factor
mtDNA maintenance in vertebrates and, 413–14, 423–26
Mucosal vascular addressin cellular adhesion molecules (MAdCAMs)
molecular structure and, 851
Multiple copy approach
protein folding and, 567
Mung bean nuclease
subtractive cloning and, 770
μ-receptors
D-amino acids in animal peptides and, 339
Muscle contraction
force effects on kinetics and, 785
movement in biological systems and, 1, 14–15, 17
Mus musculus
B_{12}-dependent enzymes and, 275
replication protein A and, 64, 68
Mutases
B_{12}-dependent enzymes and, 269, 272, 274–75, 296–308
Mutations
acyl-coenzyme A:cholesterol acyltransferase and, 622
and amyloid seeding in Alzheimer's disease and scrapie, 400

ATP synthase and, 717, 723, 736, 739, 742
B_{12}-dependent enzymes and, 285, 288–89, 308
cell adhesion molecules and, 839, 842–43
clathrin-coated vesicles and, 531
force effects on kinetics and, 793, 801
G protein structures and, 653, 658–59, 662, 664, 667, 671
membrane phospholipid diversity and, 200, 207–8, 210, 214–15, 218, 226
molybdenum-cofactor-containing enzymes and, 237
mtDNA maintenance in vertebrates and, 429–30
PEPCK gene expression and, 588, 602–3
prokaryotic poly(A) mRNA and, 178, 183–84, 186, 188, 190
protein folding and, 556, 560, 562, 567, 571, 574
replication protein A and, 72–75, 78–81, 83–84, 86
and ribosomes and translation, 706–12
and RNA and protein enzyme catalysis, 22–23, 43–44, 46, 48
transcript elongation and, 127, 132
Z ring and, 95, 97, 102–7, 109–10, 112
mut genes
B_{12}-dependent enzymes and, 275, 298
MutS protein
mtDNA maintenance in vertebrates and, 427
Mycelium
branching
Z ring and, 111
Mycobacterium leprae
B_{12}-dependent enzymes and, 275
prokaryotic poly(A) mRNA and, 185
Mycoplasma
Z ring and, 94, 111–12
Mycoplasma capricolum
and ribosomes and translation, 711
Mycoplasma genitalium
prokaryotic poly(A) mRNA and, 185
Z ring and, 111–12
Myoblasts
subtractive cloning and, 776
Myoglobin
protein folding and, 559–60
Myosin
ATP synthase and, 744
force effects on kinetics and, 785–86, 803
Myosin ATPase
force effects on kinetics and, 795–96

N

Na^+
movement in biological systems and, 17
translocation
ATP synthase and, 735–37
Na^+-K^+ ATPase
movement in biological systems and, 17
NAC fibrils
and amyloid seeding in Alzheimer's disease and scrapie, 396, 404
NAD^+
molybdenum-cofactor-containing enzymes and, 250
and RNA and protein enzyme catalysis, 32
NADH oxidase
membrane phospholipid diversity and, 215
Nanometer measurements
of movement
force effects on kinetics and, 785, 800
Native configurations
protein folding and, 569–74
ndaA gene
prokaryotic poly(A) mRNA and, 181
Near-native configurations
protein folding and, 569, 571–73
Negative-stain electron microscopy
Z ring and, 100
Neocallimastrix frontalis
PEPCK gene expression and, 583
Neural cell adhesion molecules (NCAMs)
molecular structure and, 823–36
Neural markers
early
subtractive cloning and, 776
Neuroglian cell adhesion molecule
molecular structure and, 836–39
Neurological disease-causing mutations
cell adhesion molecules and, 839, 842–43
Neuronal signaling
transcriptional regulation by cAMP and, 807
Neuron-specific assmbly protein
clathrin-coated vesicle formation and, 526
Neurospora crassa
protein import into mitochondria and, 865, 871, 876–78, 880, 882–83, 892, 899, 903
Neurotoxicity
and amyloid seeding in Alzheimer's disease and scrapie, 395
Neurotransmitters
D-amino acids in animal peptides and, 339–40
Neutron diffraction
and ribosomes and translation, 691–92
Newborn cells
Z ring and, 98
NF-1 nuclear factor
PEPCK gene expression and, 586, 590, 597
Ni^{2+}
transcript elongation and, 133
Nisin
D-amino acids in animal peptides and, 338
Nitrate reductases
molybdenum-cofactor-containing enzymes and, 235, 241, 255–57
Nitrocellulose membrane
subtractive cloning and, 769
Nitrogen
B_{12}-dependent enzymes and, 269, 274, 276–78, 291, 294, 306
molybdenum-cofactor-containing enzymes and, 262–63, 265
and RNA and protein enzyme catalysis, 29–30
Nitrogenases
molybdenum-cofactor-containing enzymes and, 233, 265
NME1 gene
mtDNA maintenance in vertebrates and, 417
Nomenclature

replication protein A and, 63–64
Noncovalent binding interactions
movement in biological systems and, 1
Non-insulin-dependent diabetes mellitus (NIDDM)
PEPCK gene expression and, 596
Non-LTR element
choosing insertion site and, 437, 440
Nonspecific compacting force
protein folding and, 573
Northern blot analysis
acyl-coenzyme A:cholesterol acyltransferase and, 622, 624
NPC factor
acyl-coenzyme A:cholesterol acyltransferase and, 627, 629–30
N-protein
transcript elongation and, 141–42
N-terminal
protein import into mitochondria and, 902–6
Nuclear factors
transcriptional regulation by cAMP and, 807, 810–11
Nuclear genes
mtDNA maintenance in vertebrates and, 409, 430
prokaryotic poly(A) mRNA and, 192
protein import into mitochondria and, 863
Z ring and, 113
Nuclear magnetic resonance (NMR)
D-amino acids in animal peptides and, 343
ATP synthase and, 724, 739
G protein structures and, 646
membrane phospholipid diversity and, 223
protein folding and, 555, 559, 561
and ribosomes and translation, 686–88
and RNA and protein enzyme catalysis, 24
Nuclear oncogene proteins
O-linked glycosylation and, 315, 322–23
Nuclear pore complex
O-linked glycosylation and, 315, 319–20
Nuclear proteins
dynamic *O*-linked glycosylation and, 315–31
Nuclear transport
O-linked glycosylation and, 319–20
Nucleases
subtractive cloning and, 757, 760, 770
Nucleation-dependent polymerization
and amyloid seeding in Alzheimer's disease and scrapie, 385, 389–93, 399–402
Nucleation model
protein folding and, 557, 562
Nucleation site
Z ring and, 106, 108–9, 113
Nucleic acid sequences
transcript elongation and, 117
subtractive cloning and, 751–54
Nucleic acid structures
mtDNA maintenance in vertebrates and, 409
Nucleoids
mtDNA maintenance in vertebrates and, 425
segregation
Z ring and, 97, 102, 104
Nucleophiles
movement in biological systems and, 1, 8–11, 13
and RNA and protein enzyme catalysis, 31
Nucleoprotein templates
transcript elongation and, 154–55
Nucleosomes
transcript elongation and, 130
Nucleotide-binding proteins
membrane phospholipid diversity and, 211
Nucleotides
ATP synthase and, 720–21
guanine
G protein structures and, 650–70
prokaryotic poly(A) mRNA and, 185
replication protein A and, 69, 77
and ribosomes and translation, 679
subtractive cloning and, 757
Null mutants
PEPCK gene expression and, 602–3
replication protein A and, 72
Z ring and, 95
Nun protein
transcript elongation and, 142
Nus proteins
transcript elongation and, 124

O

O^6-methyl-deoxyguanosine
mtDNA maintenance in vertebrates and, 427
Occlusion
replication protein A and, 69
Off-axis forces
force effects on kinetics and, 790
Off-lattice models
protein folding and, 554, 569
Oil red
movement in biological systems and, 7
Okazaki fragment processing
replication protein A and, 79
Oleic acid
acyl-coenzyme A:cholesterol acyltransferase and, 633
Oligodeoxythymidine
replication protein A and, 69
Oligo(dT)-cellulose chromatography
prokaryotic poly(A) mRNA and, 181, 190
Oligo(dT) primer
prokaryotic poly(A) mRNA and, 178
subtractive cloning and, 769
Oligomeric nucleus
and amyloid seeding in Alzheimer's disease and scrapie, 388–89
Oligomerization
and amyloid seeding in Alzheimer's disease and scrapie, 391, 393–94, 396, 398, 401
cell adhesion molecules and, 840–42
Oligonucleotides
replication protein A and, 69–71
and RNA and protein enzyme catalysis, 25, 28, 30, 32, 35, 37–38, 40–42, 48–49, 51
Oligosaccharides
membrane phospholipid diversity and, 204
O-linked glycosylation
of nuclear and cytoskeletal proteins
antigens, 330
chromatin-associated proteins and transcription, 321–22

cycling enzymes, 327–29
cytoskeletal bridging proteins, 325–26
cytoskeletal proteins, 323–26
future research, 331
glucose homeostasis regulation, 329–30
infectious organisms, 326–27
intermediate filament proteins, 324–25
membrane proteins, 323–26
metabolism, 327–30
microtubule-associated proteins, 325
nuclear O-GLcNAcylated proteins, 319–23
nuclear oncogene proteins, 322–23
nuclear pore complex, 319–20
nuclear transport, 319–20
parasites, 327
perspectives and summary, 316
protein synthesis regulation, 329
signal transduction, 327–30
tumor suppressor proteins, 322–23
ubiquitous distribution of O-GlcNAcylated proteins, 316–18
viruses, 326
ompA gene
prokaryotic poly(A) mRNA and, 187
Oncogenes
O-linked glycosylation and, 315, 322–23
On-pathway model
protein folding and, 557
Open reading frames (ORFs)
herpes simplex virus DNA replication and, 347
prokaryotic poly(A) mRNA and, 184–85
Opioid peptides
D-amino acids in animal peptides and, 337, 339–40, 343
Optical spectroscopy
molybdenum-cofactor-containing enzymes and, 237
Optimization
protein folding and, 565
Ordered protein aggregation
and amyloid seeding in Alzheimer's disease and scrapie, 385
orf genes
Z ring and, 111-12
Organelles
eukaryotic
prokaryotic poly(A) mRNA and, 190–93
Z ring and, 93, 113
membrane phospholipid diversity and, 199, 207, 228
mtDNA maintenance in vertebrates and, 427–29
oriC initiation site
membrane phospholipid diversity and, 208
Origin-binding protein (OBP)
herpes simplex virus DNA replication and, 347, 355–59
Origins of replication
herpes simplex virus DNA replication and, 352–68, 372–75
replication protein A and, 68
ori region
prokaryotic poly(A) mRNA and, 182
ori/rep sequences
mtDNA maintenance in vertebrates and, 415–16
OSCP protein
ATP synthase and, 742–43
Oxaloacetate
and RNA and protein enzyme catalysis, 53
Oxidation state
B_{12}-dependent enzymes and, 269, 276, 309
molybdenum-cofactor-containing enzymes and, 233, 236, 246, 248, 256–57, 263–64
Oxidative DNA damage
mtDNA maintenance in vertebrates and, 426
Oxidative phosphorylation
movement in biological systems and, 18
Oxocarbenium ion
movement in biological systems and, 11
Oxotransferases
molybdenum-cofactor-containing enzymes and, 233
Oxygen
ATP synthase and, 721, 737
B_{12}-dependent enzymes and, 274, 285–86
force effects on kinetics and, 794
G protein structures and, 652–54, 660–61
molybdenum-cofactor-containing enzymes and, 233, 247–48, 250–55, 257–58, 262, 264
movement in biological systems and, 13
PEPCK gene expression and, 584
and RNA and protein enzyme catalysis, 26–27, 29–30, 41
Oxysterol
acyl-coenzyme A:cholesterol acyltransferase and, 624–25

P

$p21^{ras}$
G protein structures and, 639–41, 643
p53 tumor suppressor protein
replication protein A and, 75–76, 82, 87
PABP protein
prokaryotic poly(A) mRNA and, 190, 194
Packaging
cargo
clathrin-coated vesicles and, 511
herpes simplex virus DNA replication and, 347, 351–52
transcript elongation and, 140
Packing
protein folding and, 549, 551–57, 562–67
and RNA and protein enzyme catalysis, 34, 43–44, 49
Palmitoleic acid
membrane phospholipid diversity and, 203
PAP I and II RNA polymerases
prokaryotic poly(A) mRNA and, 183–85
Paper electrophoresis
movement in biological systems and, 7
Papillomaviruses
replication protein A and, 77
Papova viruses
replication protein A and, 77
Paracoccus denitrificans
ATP synthase and, 734
Parasites
O-linked glycosylation and, 327
Patterning

PEPCK gene expression and, 581
Pausing
transcriptional
transcript elongation and, 117, 123–28, 159, 163
pbsA gene
prokaryotic poly(A) mRNA and, 182
PCNA protein
replication protein A and, 79
pcnB gene
prokaryotic poly(A) mRNA and, 183–84, 186, 189–90
P element
Drosophila
choosing insertion site and, 438–39, 455–57
P-enolpyruvate carboxykinase
PEPCK gene expression and, 581
Pentavalent analogs
and RNA and protein enzyme catalysis, 51
Pepsin
movement in biological systems and, 17
Peptidases
protein import into mitochondria and, 892–93
Peptide bonds
movement in biological systems and, 8
Peptide isomerase
D-amino acids in animal peptides and, 337, 342, 344
Peptides
animal
D-amino acids and, 337–44
Peptidoglycan
septal
Z ring and, 94, 105, 110, 112
Peptidyl prolyl *cis-trans* isomerases (PPIases)
protein import into mitochondria and, 896
Peptidyl transferase
and ribosomes and translation, 679
"Perfect" catalysts
and RNA and protein enzyme catalysis, 23
Perinatal period
PEPCK gene expression and, 581, 595, 599
Periodic boundary conditions
protein folding and, 552
Permeability barrier
membrane phospholipid diversity and, 199
Permeases
membrane phospholipid diversity and, 219–21
Peroxisomes
PEPCK gene expression and, 586
Pertussis toxin
G protein structures and, 650
Petite phenotype
mtDNA maintenance in vertebrates and, 427
pgsA gene
membrane phospholipid diversity and, 203, 205, 208, 210, 212–13, 216
pH
and amyloid seeding in Alzheimer's disease and scrapie, 390, 392, 396
B_{12}-dependent enzymes and, 278
force effects on kinetics and, 794, 801
membrane phospholipid diversity and, 208
molybdenum-cofactor-containing enzymes and, 256–57
movement in biological systems and, 8
protein folding and, 558–60
and RNA and protein enzyme catalysis, 25
Z ring and, 100
Phagemids
single-stranded
subtractive cloning and, 763, 769
Pharmaceutical targets
acyl-coenzyme A:cholesterol acyltransferase and, 616–17
PH domain
and phospholipases C and D, 481–82
Phenol-enhanced reassociation technique
subtractive cloning and, 771
Phenol extraction
subtractive cloning and, 768
Phenotype
and amyloid seeding in Alzheimer's disease and scrapie, 394
mtDNA maintenance in vertebrates and, 424, 427
replication protein A and, 72, 79
transcript elongation and, 144
Z ring and, 96
Phenylalanine
D-amino acids in animal peptides and, 340, 342–43
ATP synthase and, 740
G protein structures and, 654
Phenylmethylsulfonyl fluoride
D-amino acids in animal peptides and, 342
Phorbol ester
PEPCK gene expression and, 593–95
Phosphatase
Z ring and, 110
Phosphate
ATP synthase and, 721
G protein structures and, 641, 647, 652–53, 658, 660–62
membrane phospholipid diversity and, 203, 215
molybdenum-cofactor-containing enzymes and, 237, 261–62
movement in biological systems and, 15–16, 18
replication protein A and, 71
and RNA and protein enzyme catalysis, 28
subtractive cloning and, 757
Phosphatidic acid
membrane phospholipid diversity and, 201–2, 206
phospholipase D and, 500–1
Phosphatidylcholine
acyl-coenzyme A:cholesterol acyltransferase and, 614, 617, 633
Phosphatidylethanolamine
membrane phospholipid diversity and, 199, 202, 216–22
Phosphatidylglycerol
membrane phospholipid diversity and, 199, 202, 208–16
Phosphatidylinositol
and phospholipases C and D, 475–502
Phosphatidylinositol 3-kinase
PEPCK gene expression and, 595
Phosphatidylserine
membrane phospholipid diversity and, 202
Phosphodiester backbone
and RNA and protein enzyme catalysis, 33, 45
Phosphoenolpyruvate carboxykinase (GTP)(PEPCK)
gene expression regulation and cAMP, 589–93
cis-regulatory elements, 587–89
diabetes, 595–96

evolutionary conservation of genes, 584
gene transcription regulation, 585
glucocorticoids, 589–93
hormonal control of gene transcription, 589–93
inhibition, 593–95
insulin, 593–95
kidney, 587
liver, 586–87
metabolism, 583–84
overview, 585
phorbol ester, 593–95
physiological control of PEPCK levels in mammalian tissues, 584–85
protein-DNA binding, 586–87
regulatory elements in 5′ region of gene, 585–89
renal acidosis, 593
species-specific regulation, 596–98
thyroid hormone, 589–93
transcription factors, 590
white adipose tissue, 587–88
Phospholipase C (PLC)
C2 domain, 482–83
catalytic action of PLC isozymes, 483
catalytic core composed of X and Y domains, 479–80
G protein regulation sites, 485–86
as GTPase-activating protein, 486–87
introduction, 477
mammalian PLCβ isozymes, 483–87
perspectives, 502
PH domain, 481–82
PI-specific PLC isozymes, 477–83
PLCδ isozymes, 490
PLCγ isozymes, 487–89
substrate PIP_2, 490–91
Phospholipase D (PLD)
Arf family of G proteins, 493–94
cellular functions, 500–2
distribution, 491–92
enzymology, 498–500
modulatory effects of Rho proteins, 494–95
perspectives, 502
phosphatidic acid, 500–1
PIP_2 cofactors, 493
protein kinase C, 495–97
protein trafficking, 501–2
regulation of activity, 492–98
structure, 498–500
synergism by regulatory proteins, 497–98
types of activity, 491–92
Phospholipases
phosphatidylinositol-specific, 475–502
Phospholipids
acyl-coenzyme A:cholesterol acyltransferase and, 616, 633–34
membrane diversity and, 199–28
Phosphorothioate
and RNA and protein enzyme catalysis, 28
subtractive cloning and, 773
Phosphorylase
prokaryotic poly(A) mRNA and, 184
Phosphorylation
ATP synthase and, 717, 737
force effects on kinetics and, 793
G protein structures and, 668
movement in biological systems and, 15, 18
replication protein A and, 61, 71–72, 77, 80, 83–87
transcript elongation and, 119
Z ring and, 104
Phosphoryl groups
G protein structures and, 663
Phosphotransesterification
and RNA and protein enzyme catalysis, 25–26, 32
Phosphoryl transfer reaction
and RNA and protein enzyme catalysis, 25, 29–31, 37, 41, 50–52, 54
Phyllomedusa sauvagei
D-amino acids in animal peptides and, 339, 341, 344
Phylogeny
mtDNA maintenance in vertebrates and, 422
and RNA and protein enzyme catalysis, 19
Physical methods
protein folding and, 549
Phytoplankton
molybdenum-cofactor-containing enzymes and, 242
Pigments
movement in biological systems and, 4–5
Pits
clathrin-coated, 527–34
pK_a
movement in biological systems and, 8
and RNA and protein enzyme catalysis, 25, 30–31
Plaques
and amyloid seeding in Alzheimer's disease and scrapie, 392, 395
atherosclerotic acyl-coenzyme A:cholesterol acyltransferase and, 615
Plasma
acyl-coenzyme A:cholesterol acyltransferase and, 614–15
Plasma membrane
acyl-coenzyme A:cholesterol acyltransferase and, 623, 627–33
Plasmids
prokaryotic poly(A) mRNA and, 173, 177, 183, 186–87, 189, 194
Z ring and, 96
Plasmodium falciparum
O-linked glycosylation and, 327
Plasmolysis
Z ring and, 106
Plasticity
protein folding and, 556
Pleiotropy
membrane phospholipid diversity and, 227
and ribosomes and translation, 710
P-loop
ATP synthase and, 738
G protein structures and, 652
PEPCK gene expression and, 584
plsB gene
membrane phospholipid diversity and, 201
PNPase
prokaryotic poly(A) mRNA and, 177–79, 186–89
pnp gene
prokaryotic poly(A) mRNA and, 177–80, 183, 186–87
Pockets
G protein structures and, 669
and RNA and protein enzyme catalysis, 53
Point mutations
and amyloid seeding in Alzheimer's disease and scrapie, 400
replication protein A and, 72, 83
Polar atoms
protein folding and, 552

Polar sites
Z ring and, 107–11, 113
Polyadenylation
of mRNA in prokaryotes
archaea, 193
bacterial cDNA libraries, 176–77
bacterial poly(A) RNA structure, 176–82
bacterial poly(a) RNA synthesis, 182–86
bacteriophage T7 mRNAs, 181–82
B. subtilis hag mRNA, 181
chloroplasts, 192–93
crp mRNA, 179
E. coli mRNAs, 180–81
eukaryotic organelles, 190–93
eukaryotic poly(A) RNA compared to, 182
introduction, 174–75
in vitro poly(A) RNA synthesis, 185–86
lacZ mRNA, 179–80
lpp mRNA, 177–78
mitochondria, 191–92
plasmid regulation by antisense RNA, 186–87
polyadenylation sites of specific mRNAs, 177–82
poly(A) polymerases, 182–85
poly(A) tracts, 175–76
possible functions, 186–90
relationships between poly(A) polymerases and 3′-exonucleases and their effect on mRNA half-life, 187–90
rho mRNA, 180
rpso mRNA, 178–79
translation of mRNA, 190
Poly(A) polymerase
prokaryotic poly(A) mRNA and, 173
Poly(A)+ elements
choosing insertion site and, 461–63
Poly(A)+ mRNA
subtractive cloning and, 763
Polycistronic mRNA
prokaryotic poly(A) mRNA and, 174, 176, 181, 191
transcript elongation and, 139
Polyethylene glycol
subtractive cloning and, 771
Polyhedra
Voronoi
protein folding and, 552
Polyketides
and RNA and protein enzyme catalysis, 45
Polymerase accessory proteins
replication protein A and, 79
Polymerase chain reaction (PCR)
G protein structures and, 664
prokaryotic poly(A) mRNA and, 180
and RNA and protein enzyme catalysis, 50
subtractive cloning and, 751, 763–65, 768, 770, 772, 774–79
Z ring and, 109
Polymerases
prokaryotic poly(A) mRNA and, 182–85
transcript elongation and, 155–57
Polymer assembly rate
force effects on kinetics and, 785–86, 788
Polymer concentration
force effects on kinetics and, 792–93
Polymer dynamics
force effects on kinetics and, 789–90, 792
Polymerization
mtDNA maintenance in vertebrates and, 421
nucleation-dependent
and amyloid seeding in Alzheimer's disease and scrapie, 385, 389–93, 399–402
Z ring and, 93–94, 99–101, 104, 106, 114
Polymorphism
lipid
membrane phospholipid diversity and, 199, 222–27
Polyoma virus
replication protein A and, 75
transcript elongation and, 144
Polypurines
replication protein A and, 68
Polypyrimidines
replication protein A and, 68
Polysomes
prokaryotic poly(A) mRNA and, 190
subtractive cloning and, 759
n-3 Polyunsaturated fatty acids (PUFAs)
acyl-coenzyme A:cholesterol acyltransferase and, 633
Pools
cholesterol
acyl-coenzyme A:cholesterol acyltransferase and, 625–27, 633
subtracted
subtractive cloning and, 774–75
Pores
nuclear
O-linked glycosylation and, 315, 319–20
translocation
protein import into mitochondria and, 882
Porphyrins
B_{12}-dependent enzymes and, 271
Porphyromonas gingivalis
B_{12}-dependent enzymes and, 275
Positioning
and RNA and protein enzyme catalysis, 39–40, 53
"Positive inside rule"
membrane phospholipid diversity and, 220
Positive selection
subtractive cloning and, 751, 769–74, 776–78, 780
Posttranslational protein import
mitochondria and, 875–76
Posttranslational reactions
D-amino acids in animal peptides and, 337–38, 341
prokaryotic poly(A) mRNA and, 180, 185
replication protein A and, 86–87
Potassium chloride
Z ring and, 112
"Power stroke"
protein import into mitochondria and, 890
PPARγ2 transcription factor
PEPCK gene expression and, 586, 590
Predictive success
protein folding and, 567
Premolten globule state
protein folding and, 561–62
Preorientation
and RNA and protein enzyme catalysis, 22
Preproteins
protein import into mitochondria and, 863, 868–70, 872–93
Pre-rRNA
and RNA and protein enzyme catalysis, 20
Presenilin
and amyloid seeding in Alzheimer's disease and scrapie, 387

Presequences
protein import into mitochondria and, 866–67
Pressure denaturation
protein folding and, 561
Primary transcripts
prokaryotic poly(A) mRNA and, 173
Primers
choosing insertion site and, 460–65
mtDNA maintenance in vertebrates and, 416–17
prokaryotic poly(A) mRNA and, 178, 180, 185, 191
subtractive cloning and, 770–72, 776
Prion protein
and amyloid seeding in Alzheimer's disease and scrapie, 385, 399–402
Probes
ATP synthase and, 717, 719–21
and ribosomes and translation, 695
Processivity
and RNA and protein enzyme catalysis, 48
Prokaryotes
membrane phospholipid diversity and, 201
poly(A) mRNA and, 173–95
transcript elongation and, 117, 126–28, 136
Z ring and, 93–114
Proline
B_{12}-dependent enzymes and, 285
membrane phospholipid diversity and, 218
Promiscuous transcription phenotype
transcript elongation and, 144
Promoters
acyl-coenzyme A:cholesterol acyltransferase and, 622
choosing insertion site and, 450–51
PEPCK gene expression and, 581, 587, 591, 593–98, 602, 605–7
prokaryotic poly(A) mRNA and, 180
transcript elongation and, 117
transcriptional regulation by cAMP and, 807
β-Propellers
cell adhesion molecules and, 848
G protein structures and, 666–67, 669
Propionigenium modestum
ATP synthase and, 736
Propionamide
B_{12}-dependent enzymes and, 271
Propionibacterium shermanii
methylmalonyl-CoA mutase and, 273–75, 291, 298, 302, 304–6
Protease inhibitor complexes
protein folding and, 554
Proteases
and amyloid seeding in Alzheimer's disease and scrapie, 401
Protein Data Bank
molybdenum-cofactor-containing enzymes and, 243, 260
Protein-DNA binding
PEPCK gene expression and, 586–87, 607
Protein domain movements
force effects on kinetics and, 794
Protein enzymes
catalysis and, 19–54
Protein folding
endgame and
ab initio methods, 565–66, 568–69
assessing accuracy, 566–67
carbonic anhydrase, 558
classification, 564–66
cytochrome *c*, 559
discrete-state models and energy functions, 569–70
easiness of problem, 567
energy minimization, 570–71
equilibrium, 558–62
experiments, 555–62, 566
folding pathways, 557–58
getting to endgame, 567–73
good packing, 556–57
internal interfaces, 555
introduction, 550–51
kinetics, 560–62
α-lactalbumin, 559
main-chain movement, 567
molten-globule state, 558–62
myoglobin, 559–60
native configurations, 571–73
near-native configurations, 571–73
optimizing packing, 565
packing and stability, 556–57
packing characterization, 551–53
packing in solution, 556
packing tightness, 553–55
possible conformations, 565
predictive success, 567
protein core, 553–54
proximity to endgame, 567–68
random or worst root mean square, 566
search strategies, 570–71
side chain packing models, 562–67
surface, 554
threading methods, 568
torsion angles, 566–67
Voronoi construction, 552–53
X-ray structures, 551–55
protein import into mitochondria and, 863, 891, 893–97
G protein structures and, 641–43, 666
membrane phospholipid diversity and, 218–19
molybdenum-cofactor-containing enzymes and, 264
and RNA and protein enzyme catalysis, 19, 44, 51–52
Z ring and, 97
Protein import
into mitochondria
chaperoning of folding and assembly of proteins synthesized in mitochondria, 897
cis-site/*trans*-site model, 883
cleaved N-terminal targeting signals, 902–6
cotranslational protein import, 875–76
cytochrome *c*, 900, 902
cytochrome heme lyases, 899
cytosolic factors with presumptive chaperone functions, 872–74
cytosolic factors with targeting function, 874–75
domain exposure to cytosol, 877–78
energetics of translocation, 883–84, 890–91
Hsp-Hsp10 chaperonin system, 895–96
HSP70 system, 884–92, 894
inner membrane proteins, 868–69
insertion of proteins into outer membrane, 897–99
internal targeting signals, 868–70
introduction, 864–66

matrix-targeting sequence interaction with lipid bilayers, 867–72
matrix-targeting signals, 866–67
membrane-embedded constituents, 878–79
mitochondrial intermediate peptidase, 893
mitochondrial matrix processing peptidase, 892–93
MT-HSP70, 888–89
multiple targeting of proteins to mitochondria and other subcellular locations, 870–72
outer membrane import machinery, 879
outer membrane proteins, 869–70
pathways of preprotein translocation across outer membrane, 883–84
peptidyl prolyl *cis-trans* isomerases, 896
perspectives, 906–7
posttranslational protein import, 875–76
prepeptide interactions with isolated mitochondria, 868
preprotein complex of outer membrane, 876–84
preprotein-conducting channel, 887–89
preprotein translocase of inner membrane, 884–92
preprotein translocation into matrix, 889–90
preprotein unfolding, 891
presequences, 866–67
protein folding in mitochondrial matrix, 893–97
proteolytic maturation of matrix preproteins, 892–93
receptor functions, 879–82
sorting of proteins to and integration into inner membrane, 902–6
sorting of proteins to various mitochondrial subcompartments, 897–906
sorting to intermembrane space, 899–902
steps, 865
targeting signals, 866–67
TIM complex, 884–92
TOM complex, 876–92
translocation across inner membrane, 901–902
translocation pore, 882
Protein kinase A (PKA)
transcriptional regulation by cAMP and, 807, 809, 814–16, 820
Protein kinase C (PKC)
G protein structures and, 668
phospholipase D and, 495–97
Protein kinases
membrane phospholipid diversity and, 226
replication protein A and, 61, 66, 85
Protein-ligand bond dynamics
force effects on kinetics and, 787–88
Protein localization
Z ring and, 102–5
"Protein-only" hypothesis
scrapie infectivity and, 400
Protein polymerases
and RNA and protein enzyme catalysis, 48
Protein-protein interactions
force effects on kinetics and, 787–88
herpes simplex virus DNA replication and, 368–72
protein folding and, 554
Protein radicals
B_{12}-dependent enzymes and, 301
Proteins
acyl-coenzyme A:cholesterol acyltransferase and, 619, 621–22, 623, 632–33
enzymes and, 19–54
O-linked glycosylation and, 315–31
G protein structures and, 639–73
herpes simplex virus DNA replication and, 347
membrane phospholipid diversity and, 201
movement in biological systems and, 5
replication protein A and, 74–75
and ribosomes and translation, 679
transcript elongation and, 117
Protein sorting
clathrin-coated vesicle formation and, 511–43
Protein trafficking
phospholipase D and, 501–2
Protein zero (P_0)
molecular structure and, 823, 839–43
Proteoliposomes
membrane phospholipid diversity and, 217
Proteolysis
and amyloid seeding in Alzheimer's disease and scrapie, 392
B_{12}-dependent enzymes and, 281
force effects on kinetics and, 799
G protein structures and, 647
molybdenum-cofactor-containing enzymes and, 255
protein import into mitochondria and, 892–93
replication protein A and, 71
Proteus vulgaris
molybdenum-cofactor-containing enzymes and, 259
Protofilaments
force effects on kinetics and, 792
Z ring and, 100–1
Proton transfer
ATP synthase and, 717–19, 737, 743
B_{12}-dependent enzymes and, 284, 290
force effects on kinetics and, 797–800, 802
molybdenum-cofactor-containing enzymes and, 249, 254
movement in biological systems and, 12–13
and RNA and protein enzyme catalysis, 25, 53
Protozoa
O-linked glycosylation and, 327
Proximal promoter
acyl-coenzyme A:cholesterol acyltransferase and, 622
psbA gene
prokaryotic poly(A) mRNA and, 192
psd gene
membrane phospholipid diversity and, 207, 216
Pseudogenes
choosing insertion site and, 463
Pseudoknots
and ribosomes and translation, 710
Pseudomonas aeruginosa
membrane phospholipid diversity and, 218
PsxA gene

membrane phospholipid diversity and, 203, 216–18
P-TEF protein
transcript elongation and, 124
Pterins
molybdenum-cofactor-containing enzymes and, 233, 237–40, 242, 244, 246–49, 252–53, 257, 260, 263–65
and RNA and protein enzyme catalysis, 32
Purines
G protein structures and, 653
prokaryotic poly(A) mRNA and, 178
replication protein A and, 68, 73
and RNA and protein enzyme catalysis, 29
Purkinje cells
D-amino acids in animal peptides and, 343
pur operons
transcript elongation and, 138
Pyran ring
molybdenum-cofactor-containing enzymes and, 237–38, 262
pyrBI operon
transcript elongation and, 126, 135
Pyridoxal phosphate
and RNA and protein enzyme catalysis, 32
Pyrimidines
mtDNA maintenance in vertebrates and, 427
replication protein A and, 68
and RNA and protein enzyme catalysis, 29
Pyrococcus furiosus aldehyde ferredoxin oxidoreductase
molybdenum-cofactor-containing enzymes and, 234, 236, 238–40, 259–60
Pyrophosphorolysis
transcript elongation and, 125

Q

Q2 activator
glutamine-rich transcriptional regulation by cAMP and, 816
Quasi-elastic light scattering
and amyloid seeding in Alzheimer's disease and scrapie, 391, 398
Quick-stop phenotype
replication protein A and, 79
Q-protein
transcript elongation and, 141–42, 152–53

R

Racemases
D-amino acids in animal peptides and, 342, 344
Radius of gyration
protein folding and, 560, 572
RAG clones
subtractive cloning and, 777
"Ragged" ends
subtractive cloning and, 771
Randomness
choosing insertion site and, 437
protein folding and, 558, 574
Random pool
and RNA and protein enzyme catalysis, 50–51
Random sampling
subtractive cloning and, 778
Ran protein
G protein structures and, 646–47, 653
Rap1A transcription elongation factor
G protein structures and, 655–56, 659, 670
replication protein A and, 86
RA proteins
replication protein A and, 75–76, 81
Ras-like proteins
G protein structures and, 639, 642–47, 649–52, 654–57, 660, 663–64, 670–72
Rattus norvegicus
replication protein A and, 64
Reaction intermediates
movement in biological systems and, 1
Reactive oxygen species
mtDNA maintenance in vertebrates and, 426
Read through
transcript elongation and, 147–49
Reannealing reaction
subtractive cloning and, 752, 755–57
Reassociation kinetics
nucleic acid subtractive cloning and, 751, 753–62, 770–71
recA gene
membrane phospholipid diversity and, 208–9, 211
Receptors
clathrin-coated vesicles and, 511, 538–40, 542–43
G protein structures and, 639, 659, 665, 670–71
low-density lipoprotein, 627, 634
μ-, 339
opiate, 339, 343
PEPCK gene expression and, 586
protein import into mitochondria and, 879–82
Recognition strand
and RNA and protein enzyme catalysis, 23
Recombinases
choosing insertion site and, 437, 439
Recombination
herpes simplex virus DNA replication and, 377–78
mtDNA maintenance in vertebrates and, 428–29
replication protein A and, 61, 80–81
Recruitment
clathrin-coated vesicles and, 532–33, 538–43
Redox reaction
B_{12}-dependent enzymes and, 276
molybdenum-cofactor-containing enzymes and, 233, 236–37, 248, 254, 263–64
Redundancy
prokaryotic poly(A) mRNA and, 184
Refolding
protein folding and, 561–62
Refractory period
transcriptional regulation by cAMP and, 813–14
Regeneration
movement in biological systems and, 15
Regulatory elements
mtDNA maintenance in vertebrates and, 423–25
O-linked glycosylation and, 315
PEPCK gene expression and, 581, 585–89, 595, 597
transcript elongation and, 117
"Relaxed" conformation
PEPCK gene expression and, 601
"Relaxing factor"
movement in biological systems and, 16
Release factors

G protein structures and, 639–40, 670–72
Renaturation kinetics
subtractive cloning and, 754, 756, 762
Repair proteins
replication protein A and, 75
Replicating DNA
choosing insertion site and, 452–53
Replication factor A (RFA)
see Replication protein A (RPA)
Replication forks
replication protein A and, 79
transcript elongation and, 145
Z ring and, 104
Replication protein A (RPA)
cellular process modulation
cellular messenger, 87
phosphorylation, 84–86
posttranslational modifications, 86
transcriptional regulation, 86–87
function
direct unwinding of double-stranded DNA, 76–77
DNA repair, 79–80
DNA replication, 77–79
modulation of enzymatic activities, 77
recombination, 80–81
interactions with DNA
alternate modes of RPA binding, 70–71
damaged DNA, 73–74
double-stranded DNA, 73–74
hsRPA gene homology, 68
other proteins, 75–76
repair proteins, 75
replication proteins, 74–75
RPA binding mechanism, 71–73
RPA-protein interaction mechanisms, 76
single-stranded DNA, 68–73
specific binding parameters, 69–70
introduction, 62–64
nomenclature, 63–64
perspectives, 62–64
structure and function
cellular localization, 66
complex assembly and subcomplexes, 65
RPA14, 83–84
RPA32, 83–84
RPA70, 81–83
sequence comparisons and sequence differences, 67–68
solution structure, 64–65
summary of known homologues, 64
Reporter genes
PEPCK gene expression and, 594
Repositories
subtractive cloning and, 780
Repressed genes
choosing insertion site and, 452
Repulsion
protein folding and, 551, 559
Restriction endonucleases
subtractive cloning and, 764, 769
Restriction fragment length polymorphism (RFLP)
subtractive cloning and, 771, 777
Retinoic acid
PEPCK gene expression and, 586, 592
Retrotranscripts
choosing insertion site and, 463
Retrotransposition
choosing insertion site and, 440
Retroviral integrases
choosing insertion site and, 447–48
Retroviruses
choosing insertion site and, 437, 440
Reverse transcription
choosing insertion site and, 460–65
Reversible transport
movement in biological systems and, 15
RFA genes
replication protein A and, 81
RFC protein
replication protein A and, 79
RGS proteins
G protein structures and, 664
Rh1B protein
prokaryotic poly(A) mRNA and, 189
Rhizobium meliloti
Z ring and, 112
Rhodobacter capsulatus
molybdenum-cofactor-containing enzymes and, 234, 237, 241–42, 247
Rhodobacter sphaeroides
membrane phospholipid diversity and, 202, 204–5
molybdenum-cofactor-containing enzymes and, 234, 237–39, 241–42, 244–45, 247, 249
rho gene
prokaryotic poly(A) mRNA and, 178–80, 182, 187–88
Rhodopseudomonas capsulata
prokaryotic poly(A) mRNA and, 175
Rhodospirillum rubrum
prokaryotic poly(A) mRNA and, 175
Rho proteins
phospholipase D and, 494–95
Ribbons
cell adhesion molecules and, 848–49
molybdenum-cofactor-containing enzymes and, 251, 260
Ribonuclease A
protein folding and, 561
and RNA and protein enzyme catalysis, 43
Ribonucleases
prokaryotic poly(A) mRNA and, 184, 186, 190
Ribonucleoproteins
mtDNA maintenance in vertebrates and, 420
Ribonucleotide reductase
B_{12}-dependent enzymes and, 272, 274, 301
herpes simplex virus DNA replication and, 347, 374–75
Ribosomal RNA (rRNA)
mtDNA maintenance in vertebrates and, 429
and ribosomes and translation, 679–80
Ribosomes
D-amino acids in animal peptides and, 338, 341
G protein structures and, 647–48, 656, 673
PEPCK gene expression and, 595
prokaryotic poly(A) mRNA and, 173–74, 178–90, 193–94
and RNA and protein enzyme catalysis, 23, 48–49
structure
30S subunit, 695–700
50S subunit, 700–5
defining minimal catalytically competent ribosome, 705–6
electron microscopy reconstruction, 688–91
functional analysis, 705–12

molecular modeling, 692–94
mRNA interactions, 698–700
mutational analysis, 709–12
neutron diffraction, 691–92
new methods for mutant ribosome population analysis, 706–8
nuclear magnetic resonance, 686–88
structural probing, 695
structure-function relationships, 694–95
tRNA interactions, 696–705
X-ray crystallography, 686–88
transcript elongation and, 152
translation and
10Sa RNA, 685–86
elongation factors, 683–84
models for translation, 680–83
perspectives, 680
ribosome structure, 686
translational accuracy, 684–85
translational cycle, 680–83
Ribosylation
ADP
replication protein A and, 86
Ribozymes
and RNA and protein enzyme catalysis, 19, 22–46, 48, 52, 54
Rifampicin
and amyloid seeding in Alzheimer's disease and scrapie, 393
Rigidity
and RNA and protein enzyme catalysis, 40, 44–45, 49, 53
R-loops
mtDNA maintenance in vertebrates and, 420
RNA
enzymes and, 19–54
RNA/DNA helicase
F_1-ATPase and, 744
RNA-DNA hybrid structure
at O_H
mtDNA maintenance in vertebrates and, 413, 415–20
RNA enzymes
catalysis
protein enzymes and, 19–54
RNA helicases
prokaryotic poly(A) mRNA and, 189
RNA polymerases
prokaryotic poly(A) mRNA and, 182–85
replication protein A and, 80
subtractive cloning and, 768
transcript elongation and, 117, 119–23, 125–35, 137–38, 141–57, 159–62
RNA polymerase II
choosing insertion site and, 450–51
O-linked glycosylation and, 315
transcriptional regulation by cAMP and, 819–20
RNA primers
mtDNA maintenance in vertebrates and, 411, 413, 416–17
replication protein A and, 78
Rnase H
subtractive cloning and, 767, 769
RNase MRP
mtDNA maintenance in vertebrates and, 409, 416–17, 419–20
RNases
membrane phospholipid diversity and, 208
prokaryotic poly(A) mRNA and, 177–79, 181–82, 184, 186–89
and RNA and protein enzyme catalysis, 22–23, 28, 43, 52
subtractive cloning and, 765
RNA transcription
mtDNA maintenance in vertebrates and, 409
rnb gene
prokaryotic poly(A) mRNA and, 177–78, 180, 187
rne gene
prokaryotic poly(A) mRNA and, 178, 180, 187–88
rnh genes
membrane phospholipid diversity and, 208, 210
prokaryotic poly(A) mRNA and, 184
rodA mutant
Z ring and, 104
ROH
movement in biological systems and, 10
Rolling-circle mode of replication
herpes simplex virus DNA replication and, 347
Root mean square
protein folding and, 563–64, 566–73
Rop protein
protein folding and, 556
Rossmann fold
cell adhesion molecules and, 850
Rotamers
protein folding and, 555, 563–67
Rot analysis
subtractive cloning and, 756, 760–62, 765
Rotatable bonds
and RNA and protein enzyme catalysis, 21
Rotational catalysis
ATP synthase and, 717, 740–42
Rotenone
membrane phospholipid diversity and, 215
RPA genes
replication protein A and, 63–64, 67–68, 80, 82, 86
rpsO gene
prokaryotic poly(A) mRNA and, 178–79, 184, 187
rrn operons
transcript elongation and, 137
RU-486
PEPCK gene expression and, 608

S

S1 nuclease
subtractive cloning and, 760
S1 ribosomal protein
prokaryotic poly(A) mRNA and, 173, 190, 193–94
SIII protein
transcript elongation and, 124
S6 ribosomal kinase
PEPCK gene expression and, 595
S6 ribosomal protein
G protein structures and, 648
S10 ribosomal protein
transcript elongation and, 152
S15 ribosomal protein
prokaryotic poly(A) mRNA and, 178
S20 ribosomal protein
prokaryotic poly(A) mRNA and, 189
Saccharomyces cerevisiae
acyl-coenzyme A:cholesterol acyltransferase and, 620–21
clathrin-coated vesicles and, 542
G protein structures and, 669
membrane phospholipid diversity and, 201
mtDNA maintenance in

vertebrates and, 414–15, 417, 419–20, 428
O-linked glycosylation and, 320
replication protein A and, 63–64, 66–69, 72–73, 80–82, 84, 86
transcript elongation and, 132, 134, 138, 145, 149, 157
Z ring and, 113
Saddle point
molybdenum-cofactor-containing enzymes and, 259
movement in biological systems and, 13
Salt
intracellular
protein folding and, 559
Z ring and, 112
Sandwiching
D-amino acids in animal peptides and, 343
Sarcoplasmic reticulum
movement in biological systems and, 15–17
Sausage morphology
Z ring and, 95
Scaffolds
G protein structures and, 653
Scanning transmission electron microscopy
replication protein A and, 70
Schiff bases
and RNA and protein enzyme catalysis, 32
Schistosoma mansoni
O-linked glycosylation and, 327
Schizosaccharomyces pombe
mtDNA maintenance in vertebrates and, 417
replication protein A and, 64–65, 68
transcript elongation and, 138, 149
Scoring functions
protein folding and, 549
SCP2 protein
acyl-coenzyme A:cholesterol acyltransferase and, 632–33
Scrapie
amyloid seeding and, 385–405
subtractive cloning and, 776
sdiA gene
Z ring and, 96
SDS-PAGE
and amyloid seeding in Alzheimer's disease and scrapie, 388
membrane phospholipid diversity and, 217
replication protein A and, 65
Search engine
conformational
protein folding and, 571
Secondary structures
conserved
and RNA and protein enzyme catalysis, 19
protein folding and, 554, 557–58, 562, 571
Second messengers
replication protein A and, 87
transcriptional regulation by cAMP and, 807
Sec proteins
membrane phospholipid diversity and, 212–13, 218, 221
Sedimentation
and amyloid seeding in Alzheimer's disease and scrapie, 398
Seeding
amyloid, 385–405
Selective pressures
choosing insertion site and, 437, 444–45
prokaryotic poly(A) mRNA and, 195
and RNA and protein enzyme catalysis, 30
Self-avoidance
choosing insertion site and, 458–59
Self-cleavage
and RNA and protein enzyme catalysis, 23
Self-splicing
and RNA and protein enzyme catalysis, 20, 22–23, 28, 45–47
Sensors
cholesterol
acyl-coenzyme A:cholesterol acyltransferase and, 613
clathrin-coated vesicles and, 531
G protein structures and, 673
Septation
Z ring and, 93–94, 97–98, 101–5, 109–12
Sequence complexity
subtractive cloning and, 754
Sequence elements
PEPCK gene expression and, 581
Sequence identity
G protein structures and, 639
"Sequence space"
and RNA and protein enzyme catalysis, 50
Sequestration
clathrin-coated vesicles and, 542–43
Serine
D-amino acids in animal peptides and, 338–39, 343
ATP synthase and, 738
B_{12}-dependent enzymes and, 284–86, 288–90, 306
cell adhesion molecules and, 843, 850–51
G protein structures and, 652–53, 667–68
molybdenum-cofactor-containing enzymes and, 243, 247, 249
movement in biological systems and, 8
O-linked glycosylation and, 315, 327, 331
replication protein A and, 84
and RNA and protein enzyme catalysis, 31
Serine phosphatase
Z ring and, 110
Serine proteases
and RNA and protein enzyme catalysis, 31–32
Sf9 cells
acyl-coenzyme A:cholesterol acyltransferase and, 624
Shape complementarity
protein folding and, 554
Shear motion
protein folding and, 555
Sheets
Z ring and, 100–1
β-Sheets
B_{12}-dependent enzymes and, 287
cell adhesion molecules and, 848
G protein structures and, 641, 647
molybdenum-cofactor-containing enzymes and, 242
protein folding and, 561
replication protein A and, 71
shibire allele
clathrin-coated vesicles and, 534
Side chains
D-amino acids in animal peptides and, 343
ATP synthase and, 736
B_{12}-dependent enzymes and, 271, 285, 304
G protein structures and, 643
molybdenum-cofactor-containing enzymes and,

237, 239, 243–45, 247, 251, 253, 257, 262, 264
protein folding and, 549–51, 558–59, 562–68, 573
and RNA and protein enzyme catalysis, 20–21, 32, 34, 43
Signal transduction
G protein structures and, 643, 665
membrane phospholipid diversity and, 201, 206, 217, 228
mtDNA maintenance in vertebrates and, 430
O-linked glycosylation and, 327–30
PEPCK gene expression and, 595
protein import into mitochondria and, 866–68, 902–6
replication protein A and, 87
transcript elongation and, 137–46
transcriptional regulation by cAMP and, 807, 818–19
Z ring and, 103
"Silent chromatin"
choosing insertion site and, 439, 451–52
Simian virus 40 (SV40)
replication protein A and, 68, 72, 74–78, 82–83, 86
transcript elongation and, 144
Sines
choosing insertion site and, 463
Single-stranded DNA (ssDNA)
replication protein A and, 68–73, 75, 78–79
subtractive cloning and, 756
Single-stranded DNA-binding protein
human, 61–88
Site-directed mutagenesis
B_{12}-dependent enzymes and, 305
and RNA and protein enzyme catalysis, 24
Site-specific poly(A)+ elements
choosing insertion site and, 461–62
Smooth muscle cells
acyl-coenzyme A:cholesterol acyltransferase and, 615, 633
Snails
D-amino acids in animal peptides and, 337, 340–41
Snub cube
protein folding and, 552
Solid-state nuclear magnetic resonance spectroscopy (SSNMR)
and amyloid seeding in Alzheimer's disease and scrapie, 388
Solubility
time-dependent amyloid proteins and, 385–405
Solute transport
membrane phospholipid diversity and, 217–18
Solution
packing in protein folding and, 556
Solvation energy
protein folding and, 572
Solvolysis rate
movement in biological systems and, 10–11
Somatic cells
membrane phospholipid diversity and, 201, 206
Sorting
clathrin-coated vesicles and, 511, 524–25, 538–40
protein import into mitochondria and, 863, 897–906
SOS protein
G protein structures and, 670
SOS response
Z ring and, 96
South American tree frog
D-amino acids in animal peptides and, 339
Southern blot analysis
subtractive cloning and, 773
Species-specific regulation
PEPCK gene expression and, 596–98
Specificity
cell adhesion molecules and, 833
movement in biological systems and, 1, 16–18
Z ring and, 107–8
Spectinomycin
and ribosomes and translation, 706
Spectroscopy
molybdenum-cofactor-containing enzymes and, 233, 237, 264–65
S phase
replication protein A and, 61, 66
transcript elongation and, 145–46
Spheroplasts
membrane phospholipid diversity and, 219
Sphingomyelin
acyl-coenzyme A:cholesterol acyltransferase and, 630, 632
Spider venom
D-amino acids in animal peptides and, 337, 341, 344
Spirals
Z ring and, 103–4, 107
Splicing
prokaryotic poly(A) mRNA and, 185
spo genes
Z ring and, 110–12
Sporomusa ovata
p-cresolyl cobamide and, 291
Sporulation
Z ring and, 109–13
Sprouting
protein folding and, 566
Sr^{2+}
membrane phospholipid diversity and, 223–25
SREBP
acyl-coenzyme A:cholesterol acyltransferase and, 628
ssb genes
replication protein A and, 64
Stability
G protein structures and, 639
prokaryotic poly(A) mRNA and, 173
protein folding and, 556–57, 560
Z ring and, 103
Stacking
subtractive cloning and, 757
Stalk
water-soluble ATP synthase and, 718, 720, 727–28
Staphylococcal nuclease
protein folding and, 561
and RNA and protein enzyme catalysis, 41, 52
Stark model
and ribosomes and translation, 692
"Starved ribosomes"
and ribosomes and translation, 691
Stator structures
force effects on kinetics and, 797
Stem-loop structures
prokaryotic poly(A) mRNA and, 177, 179–81, 187–89, 194
transcript elongation and, 152
Stepwise substitution

through carbocation intermediate
movement in biological systems and, 10
Stereochemistry
and RNA and protein enzyme catalysis, 24
Steric hindrance
molybdenum-cofactor-containing enzymes and, 258
Sterol
acyl-coenzyme A:cholesterol acyltransferase and, 613, 623–25
"Sticky" ends
subtractive cloning and, 771
Stimulus intensity
transcriptional regulation by cAMP and, 811–12
Stochastic variability
and amyloid seeding in Alzheimer's disease and scrapie, 399
Stokes radius
G protein structures and, 665
Strain
movement in biological systems and, 14
Streptavidin
subtractive cloning and, 766, 768
Streptococcus sp.
force effects on kinetics and, 801
Streptomyces cinnamonsensis
B_{12}-dependent enzymes and, 275
Streptomyces coelicolor
Z ring and, 100, 111
Streptozotocin
PEPCK gene expression and, 600
Stress responses
transcript elongation and, 140–41
Stretching force
force effects on kinetics and, 786
Strongylocentrotus purpuratus
replication protein A and, 64, 68
Structural analysis
G proteins and, 639–73
Structure-function relationships
clathrin coated vesicles and, 516–17, 520–27
and ribosomes and translation, 694–700
Structure-reactivity coefficients
in transition-state characterization
movement in biological systems and, 12–14
Substrates
and amyloid seeding in Alzheimer's disease and scrapie, 395
B_{12}-dependent enzymes and, 272
cell adhesion molecules and, 823
molybdenum-cofactor-containing enzymes and, 250, 253–54
movement in biological systems and, 1, 14
phospholipase C and, 490–91
replication protein A and, 85
and RNA and protein enzyme catalysis, 22–23, 28, 31, 35, 37–40, 42, 51–52
Subtilin
D-amino acids in animal peptides and, 338
Subtractive cloning
basic idea, 752–53
future research
analyzing whole genome on "chips", 779–80
direct sequencing of cDNA clones, 779
long and accurate PCR, 779
problems to overcome, 777–78
solutions, 778–80
hybridization kinetics, 757, 761–62
gene number differentially expressed between two cell types, 759–60
gene number expressed in given cell or tissue, 758–59
mRNA abundance classes, 760–61
introduction, 752–53
monitoring subtraction and isolating differentially represented genes
analyzing enrichment after subtraction, 773–74
subtracted pool, 774–75
reassociation analysis, 753–54
equations describing driver excess hybridizations, 756
hydroxyapatite binding, 757
nuclease sensitivity, 757
origins, 754
rate, 754–56
reannealing measurement, 756–57
UV light absorption, 757
useful techniques, 762–63
amplification methods, 763–64
biotinylation, 766, 768
cDNA tracer, 763
chemical cross-linking, 766–69
choosing subtraction method, 775
cohesive restriction sites, 771–72
comparing different methods, 776–77
driver immobilization, 767, 769
driver preparation, 763–64
driver-tracer hybrid removal, 765
enzymatic hybrid removal, 767, 769
excess driver removal, 765
hybridization step, 765
hydroxyapatite, 765–66
immobilization methods, 767, 769
poly(A)+ driver, 763
positive selection, 769–73, 776–77
protection from enzymatic degradation, 772–73
RNase H, 767, 769
specific primer binding sites, 771–72
strategies for subtraction, 763
strepatavidin, 766, 768
subtraction step, 765
success stories, 775–76
tracer preparation, 763–64
Subunit function
ATP synthase and, 717
SulA inducible inhibitor
Z ring and, 96, 106
Sulfhydryl groups
acyl-coenzyme A:cholesterol acyltransferase and, 617
and RNA and protein enzyme catalysis, 20
Sulfite oxidase
molybdenum-cofactor-containing enzymes and, 236, 240–41, 255–58
Sulfolipids
membrane phospholipid diversity and, 205
Sulfolobus acidocaldarius
and ribosomes and translation, 707
Sulfolobus shibatae
prokaryotic poly(A) mRNA and, 194
Sulfur

molybdenum-cofactor-containing enzymes and, 247–48, 251–55, 262–63, 265
and RNA and protein enzyme catalysis, 26–27
Supercoiling
mtDNA maintenance in vertebrates and, 416
Supersaturation
and amyloid seeding in Alzheimer's disease and scrapie, 402–4
Surface
protein
protein folding and, 554
Swissprot sequence data base
replication protein A and, 67
Switch regions
B_{12}-dependent enzymes and, 269
G protein structures and, 639–40, 642, 649, 651, 653–58, 665, 669, 673
Synaptotagmin
clathrin-coated vesicles and, 531
Synechocystis sp.
B_{12}-dependent enzymes and, 275
prokaryotic poly(A) mRNA and, 185
Synergism
by regulatory proteins
phospholipase D and, 497–98

T

T antigen
large SV40
replication protein A and, 74–78, 82–83
T4 lysozyme packing mutant
protein folding and, 556, 567
Tail
dimethylbenzimidazole
B_{12}-dependent enzymes and, 283
Target DNA
choosing insertion site and, 444–48
Targeting signals
protein import into mitochondria and, 863, 866–72, 874–75, 902–6
Target priming
choosing insertion site and, 460–65
Target recognition
choosing insertion site and, 459–60
Target site selection
transposition and
avoiding self, 458–59
bacteriophage μ, 452, 458–59
chromosomal site, 448–50
discouraging transposon insertion by target transcription, 453–54
DNA breakage, 441–60
DNA joining, 441–66
Drosophila P element, 455–57
exploiting transposable elements, 465–67
intermolecular vs intramolecular transposition, 454–55
introduction, 438–41
L1, 462–63
line elements, 462–63
local hopping in flies and plants, 455–58
low target site selectivity, 444–45
mechanisms, 439–43
mobile group II introns, 463–65
μ and preference for control regions of repressed genes, 452
perspectives, 467–68
plant AC element, 457–58
poly(A)+ elements, 461–63
pseudogenes, 463
replicating DNA, 452–53
retrotranscripts, 463
retroviral integrases prefer bent DNA, 447–48
reverse transcription, 460–65
RNA polymerase III promoters, 450–51
"silent chromatin", 451–52
sines, 463
site-specific poly(A)+ elements, 461–62
target priming, 460–65
target recognition, 459–60
TC1/TC3, 445–47
telomere-specific elements, 462
TN7, 448–59
TN10, 445–55
transposase interaction with accessory proteins, 448–52
transposase interaction with target consensus sequence, 445–47
transposase interaction with target DNA, 444–48
TY1, 450–51
TY3, 450
TY5, 451–52
TAT protein
transcript elongation and, 152
Tax protein
transcriptional regulation by cAMP and, 814
TBP,TATA-binding protein
PEPCK gene expression and, 586
T cell receptor clones
subtractive cloning and, 776
Telomere-specific elements
choosing insertion site and, 462
Temperature
membrane phospholipid diversity and, 216, 223, 225
movement in biological systems and, 12
protein folding and, 559, 572–73
subtractive cloning and, 765
Z ring and, 93, 95, 102–4
Tenascin-C
molecular structure and, 823, 847
Termination
ATP synthase and, 744
prokaryotic poly(A) mRNA and, 178–80, 194
transcript elongation and, 117, 119, 123, 127, 134–35, 142, 150–51, 163
Ternary complexes
G protein structures and, 673
transcript elongation and, 117, 120, 122–25, 127, 146, 157–62
Tertiary structures
conserved
and RNA and protein enzyme catalysis, 19, 30, 37–41, 47, 51–52
G protein structures and, 639, 641–50
protein folding and, 558, 561–62, 573
Tetanus
movement in biological systems and, 17
Tetracycline
PEPCK gene expression and, 608
Tetrahydropterin
molybdenum-cofactor-containing enzymes and, 238–39

Tetrahymena thermophila
and RNA and protein enzyme catalysis, 20, 22–23, 25–27, 30, 32, 35, 39–41, 44, 46–48, 52, 54
Tetramethyl-H_4pteridinium borotetrafluoride
B_{12}-dependent enzymes and, 280
TFIIF protein
transcript elongation and, 124
TFIIS protein
transcript elongation and, 125
Thermodynamics
and amyloid seeding in Alzheimer's disease and scrapie, 387–88
movement in biological systems and, 17
Thermotoga maritima
prokaryotic poly(A) mRNA and, 193
Thermus aquaticus
G protein structures and, 643, 645–47, 656
and ribosomes and translation, 711
Thermus thermophilus
G protein structures and, 643, 651, 656
Theta replication
herpes simplex virus DNA replication and, 347
Thioesters
D-amino acids in animal peptides and, 338
Thioflavin T-induced fluorescence
and amyloid seeding in Alzheimer's disease and scrapie, 396, 398
Thiolates
molybdenum-cofactor-containing enzymes and, 257, 263
movement in biological systems and, 11, 13
Thiols
D-amino acids in animal peptides and, 338
movement in biological systems and, 5–6, 12
Thiostrepton
and ribosomes and translation, 701, 706
Threading methods
protein folding and, 568
Threonine
D-amino acids in animal peptides and, 338
ATP synthase and, 721
B_{12}-dependent enzymes and, 285
cell adhesion molecules and, 850–51
G protein structures and, 642, 652–53, 667
O-linked glycosylation and, 315, 331
Z ring and, 104
thr operon
transcript elongation and, 127
THR transcription factor
PEPCK gene expression and, 590
Thymidine kinase
herpes simplex virus DNA replication and, 347, 374
Thymidylate synthase reaction
and RNA and protein enzyme catalysis, 32
Thymine
mtDNA maintenance in vertebrates and, 426
Z ring and, 104
Thyroid hormone (TH)
PEPCK gene expression and, 581, 586, 589–93
subtractive cloning and, 776
Tight coupling
force effects on kinetics and, 802
TIM complex
protein import into mitochondria and, 863, 884–92, 905
Time-dependent solubility
amyloid proteins and, 385–405
Tissue culture cells
acyl-coenzyme A:cholesterol acyltransferase and, 623–24
Tissue functioning
force effects on kinetics and, 785
Tissue specificity
transcript elongation and, 146
T lymphocytes
subtractive cloning and, 759, 761
"Toe" feature
and ribosomes and translation, 689
TOM complex
protein import into mitochondria and, 863, 876–84, 891–92, 898
Topoisomerases
herpes simplex virus DNA replication and, 347
replication protein A and, 79
Topology
acyl-coenzyme A:cholesterol acyltransferase cholesterol ester and, 619
cell adhesion molecules and, 848
protein folding and, 562
Z ring and, 107–8
Torque generation
chemiosmotic
force effects on kinetics and, 798–99, 804
Torsion angle
G protein structures and, 652
protein folding and, 555, 562–67, 571
Toy systems
simple
protein folding and, 554
Tracers
subtractive cloning and, 752–53, 756, 758, 760, 763–69, 771–73, 777
Trafficking
cholesterol
acyl-coenzyme A:cholesterol acyltransferase and, 632–33
protein
phospholipase D and, 501–2
vesicular
clathrin-coated vesicles and, 511
Transactivation
transcriptional regulation by cAMP and, 814–16
Transcript elongation
biochemical properties, 119–23
blocks to transcript elongation, 123–36
components of intrinsic blocks to transcript elongation, 125–29
eukaryotic blocks to transcript elongation signals, 128–29
extrinsic factors blocking transcript elongation, 129–31
prokaryotic RNA polymerase pause signal components, 126–28
prokaryotic transcriptional arrest signal components, 128
transcript cleavage, 131–33
transcriptional arrest, 124–25
transcriptional pausing, 124
transcriptional slippage, 133–35
introduction, 118–19
regulation, 135–37

accessory factors, 146–55
antitermination and elongation complex efficiency, 151–53
development, 146
differentiation, 146
DNA metabolism and cell cycle, 144–46
factors stimulating elongation and read through, 147–50
future research, 162–64
growth conditions, 137–40
inchworm model, 158–62
nucleoprotein templates, 154–55
polymerase modifications, 155–57
signaling, 137–46
stress responses, 140–41
termination, 150–51
ternary complex structure models, 157–62
tissue specificity, 146
viruses and elongation controls, 141–44
Transcription
complex
transcript elongation and, 117
mtDNA maintenance in vertebrates and, 409, 414–15
O-linked glycosylation and, 321–22
PEPCK gene expression and, 585–98
regulation
cAMP and, 807–21
replication protein A and, 61, 86–87
subtractive cloning and, 763–64
Z ring and, 110
Transcriptional activators
replication protein A and, 75, 86
Transcriptional slippage
transcript elongation and, 133–35
Transcription factors
mtDNA maintenance in vertebrates and, 413–14, 423–26
O-linked glycosylation and, 315
PEPCK gene expression and, 581, 590, 592, 595, 597
replication protein A and, 82
transcriptional regulation by cAMP and, 807
Transduction
force effects on kinetics and, 785–86, 793
trans effect
molybdenum-cofactor-containing enzymes and, 246
Transfer RNA (tRNA)
G protein structures and, 647–48, 656–57, 663, 673
mtDNA maintenance in vertebrates and, 429
prokaryotic poly(A) mRNA and, 183, 191
and ribosomes and translation, 679–80, 696–98, 700–5
and RNA and protein enzyme catalysis, 22, 45
Transgenes
PEPCK gene expression and, 581, 588, 592, 594, 596, 601, 604–5, 607
trans-Golgi network
clathrin-coated vesicles and, 511, 535–37
Transition-state interactions
movement in biological systems and, 1, 12–14
and RNA and protein enzyme catalysis, 27, 34–35, 37, 41–43, 51
Translation
elongation factors
G protein structures and, 639, 641, 645, 647–48, 651–57, 659, 662–63, 670, 672–73
prokaryotic poly(A) mRNA and, 173, 190
ribosomes and, 679–12
Translocases
membrane phospholipid diversity and, 214
protein import into mitochondria and, 863, 876–91
Translocation
ATP synthase and, 717–19, 735–37, 743
membrane phospholipid diversity and, 212–14
protein import into mitochondria and, 863, 882–84, 890–902
Transmembrane domains
acyl-coenzyme A:cholesterol acyltransferase and, 620–21
Transmembrane receptors
clathrin-coated vesicles and, 511
Transmissible spongiform encephalopathies
and amyloid seeding in Alzheimer's disease and scrapie, 399–400
Transport
O-linked glycosylation and, 319–20
protein import into mitochondria and, 863, 865
Transposable elements
choosing insertion site and, 437–68
Transposases
choosing insertion site and, 444–48
Transposition
target site selection and, 437–68
Transposons
see Transposable elements
TRAP protein
transcript elongation and, 139
Triacylglycerol
acyl-coenzyme A:cholesterol acyltransferase and, 616
Trichloroacetate
protein folding and, 560
Tricyclic structure
molybdenum-cofactor-containing enzymes and, 237–39, 264
Triglycerides
acyl-coenzyme A:cholesterol acyltransferase and, 633
Trimerization
membrane phospholipid diversity and, 221
Trimethylamine-*N* oxide reductase
molybdenum-cofactor-containing enzymes and, 235
Trimethyl-H_4pteridine
B_{12}-dependent enzymes and, 280
Triple mutants
prokaryotic poly(A) mRNA and, 178
Triskelion
assembly
clathrin coated vesicles and, 517
Trisomy 21
and amyloid seeding in Alzheimer's disease and scrapie, 386
Trispyrazolborate ligand
molybdenum-cofactor-containing enzymes and, 258
Triton X-100
membrane phospholipid diversity and, 221
Tritium label

D-amino acids in animal peptides and, 342
tRNA nucleotidyltransferase
prokaryotic poly(A) mRNA and, 194
trp operon
prokaryotic poly(A) mRNA and, 179
transcript elongation and, 127, 138
trpA gene
prokaryotic poly(A) mRNA and, 176, 185
Truncation
ATP synthase and, 739
B_{12}-dependent enzymes and, 282
G protein structures and, 653, 667
prokaryotic poly(A) mRNA and, 192
protein folding and, 552
and RNA and protein enzyme catalysis, 47
replication protein A and, 72
trxA gene
prokaryotic poly(A) mRNA and, 180, 187
Trypanosomatid
replication protein A and, 66
Trypsin
B_{12}-dependent enzymes and, 281
G protein structures and, 658, 669
Tryptophan
ATP synthase and, 740
G protein structures and, 658, 667, 669
molybdenum-cofactor-containing enzymes and, 244
mtDNA maintenance in vertebrates and, 422
protein folding and, 561
ts1 mutation
Z ring and, 109
Tubulin
force effects on kinetics and, 789–90, 803
transcript elongation and, 136
Z ring and, 93, 99, 101, 114
Tumor suppressor proteins
O-linked glycosylation and, 315, 322–23
replication protein A and, 75–76, 82, 87
Tungstoenzymes
molybdenum-cofactor-containing enzymes and, 233, 239–41, 253, 259–65
Turbidity
and amyloid seeding in Alzheimer's disease and scrapie, 396–98
Tyrocidine
D-amino acids in animal peptides and, 338
Tyrosine
D-amino acids in animal peptides and, 338, 343
ATP synthase and, 721, 739
B_{12}-dependent enzymes and, 287, 305
clathrin-coated vesicles and, 538–40
force effects on kinetics and, 789
molybdenum-cofactor-containing enzymes and, 244, 249
mtDNA maintenance in vertebrates and, 422
Tyrosine kinases
clathrin-coated vesicles and, 541–42

U

UL9 protein
herpes simplex virus DNA replication and, 355–59
Ultimate solution acceptor
and RNA and protein enzyme catalysis, 31
Ultracentrifugation
movement in biological systems and, 7
Ultraviolet (UV) mimetic
replication protein A and, 73
Ultraviolet (UV) light
replication protein A and, 73
subtractive cloning and, 757
Ultraviolet (UV) radiation
mtDNA maintenance in vertebrates and, 426
Uncoating reaction
clathrin-coated vesicles and, 537–38
Unisite catalysis
force effects on kinetics and, 799
Unlinked genes
prokaryotic poly(A) mRNA and, 173
Untranslated regions
prokaryotic poly(A) mRNA and, 173, 178
Uracil *N*-glycosylase
herpes simplex virus DNA replication and, 372–73
Uracil incorporation
mtDNA maintenance in vertebrates and, 426
Uracil-DNA glycosylase
herpes simplex virus DNA replication and, 347
mtDNA maintenance in vertebrates and, 427
Uridine triphosphate (UTP)
transcript elongation and, 126, 138
Uridylate
prokaryotic poly(A) mRNA and, 192
URS1 regulatory sequence
replication protein A and, 86
UV endonuclease
mtDNA maintenance in vertebrates and, 427

V

Vaccinia RNA polymerase
transcript elongation and, 120, 124, 143–44
Vacuolar sorting
clathrin-coated vesicles and, 536–37
Valine
D-amino acids in animal peptides and, 340
ATP synthase and, 723
B_{12}-dependent enzymes and, 285, 287
Vanadium
molybdenum-cofactor-containing enzymes and, 265
van der Waals interactions
molybdenum-cofactor-containing enzymes and, 263
protein folding and, 551–53, 556, 564–66
Vascular cell adhesion molecule 1 (VCAM-1)
molecular structure and, 823, 851–53
Vectorial reactions
movement in biological systems and, 1, 16–18
Vertebrates
mtDNA maintenance and, 409–30
Very-low-density lipoprotein (VLDL)
acyl-coenzyme A:cholesterol acyltransferase and, 616
Vesicles
clathrin-coated, 511–43

cycling time
and amyloid seeding in Alzheimer's disease and scrapie, 403
lipid
protein import into mitochondria and, 884
sarcoplasmic reticulum
movement in biological systems and, 15
Vibrio alginolyticus
force effects on kinetics and, 800
Vimentin
acyl-coenzyme A:cholesterol acyltransferase and, 633
Viral proteins
O-linked glycosylation and, 315, 326
Viruses
acyl-coenzyme A:cholesterol acyltransferase and, 621–22
choosing insertion site and, 441
mtDNA maintenance in vertebrates and, 426
replication protein A and, 77
transcript elongation and, 120, 124, 136, 141–44
Viscosity
force effects on kinetics and, 800–1
Vitamin B_{12}
and RNA and protein enzyme catalysis, 32
Vitamin B_{12}-dependent enzymes
B_{12} cofactor properties, 276–78
cobamide dependent methyl transferases
acetogenic metabolism, 292–93
methanogenic metabolism, 292–93
methyl transfer in methanogenesis, 294–95
methyl transfer to carbon monoxide dehydrogenase, 293–94
introduction, 270–78
methionine synthase
activation fragment structure, 286–88
catalytic reaction, 278–79
cobalamin-binding fragment structure, 283–86
dissection of enzyme into functional modules, 281–83
histidine ligands, 291
kinetic studies, 279–81
ligand triad, 288–90
mammalian, 291
mechanistic studies, 279–81
working model, 290
methylmalonyl-CoA mutase and other mutases that catalyze carbon-skeleton rearrangements
carbon-cobalt bond homolysis, 306–8
characterization and subunit composition of carbon-skeleton mutases, 298–99
hydrogen transfer from substrate concerted with carbon-cobalt bond cleavage, 301–2
implications of structure, 306–8
intermediate radical species in mutase reactions, 299–301
mechanism of rearrangement, 302–3
methylmalonyl-CoA mutase structure from *Propionibacterium shermanii*, 302, 304–6
overview, 296–98
protein radicals and reactions catalyzed by carbon-skeleton mutases, 301
perspectives, 308–9
Voronoi construction
protein folding and, 552–53
VP16 protein
replication protein A and, 75–76
V set
cell adhesion molecules and, 825–28

W

Waf-1 protein
subtractive cloning and, 776
Walker structure
ATP synthase and, 742
Walking
transcript elongation and, 120
WANCY tRNA cluster
mtDNA maintenance in vertebrates and, 422–23
Wasp venom mastoparans
G protein structures and, 671
Water (H_2O) molecules
ATP synthase and, 721
B_{12}-dependent enzymes and, 278
cell adhesion molecules and, 850
force effects on kinetics and, 799
G protein structures and, 652, 659–61, 663
molybdenum-cofactor-containing enzymes and, 233, 244, 247, 249, 253–54, 262
movement in biological systems and, 8, 10–11
protein folding and, 552–54, 558
and RNA and protein enzyme catalysis, 27, 31–32, 41–42
Water-jacketed columns
subtractive cloning and, 765
Watson-Crick base pairs
and RNA and protein enzyme catalysis, 27, 30, 35, 51
WD repeats
G protein structures and, 666–67, 669
Western blot analysis
membrane phospholipid diversity and, 219–20
prokaryotic poly(A) mRNA and, 190
White adipose tissue
PEPCK gene expression and, 581, 584, 587–88
Wild-type strains
acyl-coenzyme A:cholesterol acyltransferase and, 626
and amyloid seeding in Alzheimer's disease and scrapie, 400
B_{12}-dependent enzymes and, 289
membrane phospholipid diversity and, 224
mtDNA maintenance in vertebrates and, 429
prokaryotic poly(A) mRNA and, 177–78, 181
replication protein A and, 72
transcript elongation and, 123
Z ring and, 102–5, 107–8
Wobble pairs
and RNA and protein enzyme catalysis, 27, 30
"Working ribosomes"
and ribosomes and translation, 691
Wortmannin

PEPCK gene expression and, 595

X

Xanthine dehydrogenase
molybdenum-cofactor-containing enzymes and, 249–50
Xanthine oxidase family
molybdenum-cofactor-containing enzymes and, 235–36, 240, 247, 249–55
X chromosome
L1 neural cell adhesion molecule and, 839
subtractive cloning and, 777
X domain
and phospholipases C and D, 479–80
Xenopus laevis
acyl-coenzyme A:cholesterol acyltransferase and, 618
choosing insertion site and, 461
mtDNA maintenance in vertebrates and, 411, 414, 417–18, 421, 424
O-linked glycosylation and, 319
replication protein A and, 64, 68
subtractive cloning and, 776
transcript elongation and, 130
Xeroderma pigmentosum
mtDNA maintenance in vertebrates and, 427
XPA protein
replication protein A and, 75, 80
XPE protein
replication protein A and, 80
XPG protein
replication protein A and, 75, 80
X-ray crystallography
D-amino acids in animal peptides and, 343
ATP synthase and, 717, 719–21, 744
B_{12}-dependent enzymes and, 269, 286, 305, 309
cell adhesion molecules and, 850–51
force effects on kinetics and, 801–2
G protein structures and, 641, 643, 649, 657–58, 662–63
molybdenum-cofactor-containing enzymes and, 233, 237, 239, 244, 247–48, 254, 256, 259–60, 262–63
protein folding and, 549, 551–56, 559–63, 566–67
protein zero and, 840
replication protein A and, 71
and ribosomes and translation, 680, 686–87, 688
and RNA and protein enzyme catalysis, 24, 27, 34

Y

YAC subtraction
subtractive cloning and, 777
Y domain
and phospholipases C and D, 479–80
Yeasts
acyl-coenzyme A:cholesterol acyltransferase and, 619–21
ATP synthase and, 739
clathrin-coated vesicles and, 536–37, 542
G protein structures and, 669
membrane phospholipid diversity and, 201, 207, 214–15, 228
mtDNA maintenance in vertebrates and, 414–15, 417, 419–20, 428
O-linked glycosylation and, 320
prokaryotic poly(A) mRNA and, 193
replication protein A and, 63–69, 72–73, 80–82, 84, 86–87
transcript elongation and, 121, 123, 132, 134, 138, 145, 149, 157
Z ring and, 113
Yeast two-hybrid system
Z ring and, 96, 105, 108

Z

Z-DNA
transcript elongation and, 131
Zinc-finger motif
replication protein A and, 67, 72, 74, 83
Zn^{2+}
and amyloid seeding in Alzheimer's disease and scrapie, 392, 398
G protein structures and, 670
and RNA and protein enzyme catalysis, 30
transcript elongation and, 133
Zooplankton
molybdenum-cofactor-containing enzymes and, 242
Z ring
bacterial cell division and division inhibitors, 95–96
FtsZ, 95–101
GTPase, 98–99
introduction, 94–95
polymerization, 99–101
immunofluorescence in protein localization
additional FtsZ structures, 103–4
archaebacteria, 112–13
Bacillis subtilis, 109–11
division site, 105–8
eukaryotic organelles, 113
FtsZ in fts mutants, 102–3
FtsZ in wild-type cells, 102
FtsZ recruits FtsA, 104–5
mycoplasma, 111–12
Streptomyces coelicolor, 111
Zwitterionic phospholipids
membrane phospholipid diversity and, 202, 216–22